



*The Bancroft Library*

University of California • Berkeley











Regional Oral History Office  
The Bancroft Library

University of California  
Berkeley, California

College of Engineering Oral History Series  
University History Series

George J. Maslach

AERONAUTICAL ENGINEER, PROFESSOR, DEAN OF THE COLLEGE OF ENGINEERING,  
PROVOST FOR PROFESSIONAL SCHOOLS AND COLLEGES, VICE CHANCELLOR FOR  
RESEARCH AND ACADEMIC AFFAIRS, UNIVERSITY OF CALIFORNIA, BERKELEY,  
1949 TO 1983

With Introductions by  
Christina Maslach  
Karl Pister  
and  
Chang-Lin Tien

Interviews conducted by  
Eleanor Swent  
in 1998 and 1999

Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

\*\*\*\*\*

All uses of this manuscript are covered by a legal agreement between The Regents of the University of California and George J. Maslach dated August 20, 1998. The manuscript is thereby made available for research purposes. All literary rights in the manuscript, including the right to publish, are reserved to The Bancroft Library of the University of California, Berkeley. No part of the manuscript may be quoted for publication without the written permission of the Director of The Bancroft Library of the University of California, Berkeley.

Requests for permission to quote for publication should be addressed to the Regional Oral History Office, 486 Library, University of California, Berkeley 94720, and should include identification of the specific passages to be quoted, anticipated use of the passages, and identification of the user. The legal agreement with George J. Maslach requires that he be notified of the request and allowed thirty days in which to respond.

It is recommended that this oral history be cited as follows:

George J. Maslach, "Aeronautical Engineer, Professor, Dean of the College of Engineering, Provost for Professional Schools and Colleges, Vice Chancellor for Research and Academic Affairs, University of California, Berkeley, 1949 to 1983," an oral history conducted in 1998 and 1999 by Eleanor Swent, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 2000.



George Maslach, circa 1965.



Cataloguing information:

George J. Maslach (b. 1920)

Aeronautical engineer,  
university administrator

*Aeronautical Engineer, Professor, Dean of the College of Engineering, Provost for Professional Schools and Colleges, Vice Chancellor for Research and Academic Affairs, University of California, Berkeley, 1949 to 1983, 2000, xiii 523 pp.*

Growing up in San Francisco, 1920-1937; SF Junior College, UC Berkeley, 1937-1942; MIT Radiation Laboratory, design and development of radar, 1942-1945; General Precision Laboratories, research engineer, 1945-1949; UC Berkeley: 1949-1963, research and teaching, Director, Institute of Engineering Research; 1963-1972, Dean of College of Engineering, Free Speech Movement, Third World Liberation Movement, articulation of community colleges and universities; 1972-1981, Provost for Professional Schools and Colleges; 1981-1983, Vice Chancellor for Research and Academic Affairs; discusses advising U.S. Dept. of Commerce, U.S. Navy, research grants, development of computer science, electronics.

Introductions by Christina Maslach, professor of psychology; Karl Pister, professor emeritus of engineering; Chang-Lin Tien, chancellor emeritus, UC Berkeley.

Interviews conducted by Eleanor Swent in 1998 and 1999 for the Regional Oral History Office College of Engineering Oral History Series, the Bancroft Library, University of California, Berkeley.





## ACKNOWLEDGMENTS

The Bancroft Library, on behalf of future researchers,  
wishes to thank the following persons and organizations  
whose contributions have made possible this oral history with  
George J. Maslach

Doris C. Maslach  
Sam Ruvkun  
University of California, Berkeley, Engineering Alumni Society  
Berkeley Engineering Fund



# TABLE OF CONTENTS--George J. Maslach

PREFACE	i
INTRODUCTION by Christina Maslach	iii
INTRODUCTION by Karl S. Pister	v
INTRODUCTION by Chang-Lin Tien	vii
INTERVIEW HISTORY by Eleanor Swent	ix
BIOGRAPHICAL INFORMATION	xii
 I	
FAMILY AND EARLY YEARS TO 1937	1
Family in Poland	1
Immigrating to America, 1904	4
Potrero Hill, San Francisco's Polish Neighborhood	7
Childhood in the Mission District	10
Father's Job at Leighton Industries	12
McAllister Street and the Benedettis	17
Father's Political Interests	20
Larkin Street Apartment House, 1929	22
Home Education Helping Father	22
A Philosophy about the Value of Time	25
Religious Activity and Leaving the Catholic Church	26
The Central Library	29
Boy Scouts: Achieving Eagle Rank Very Young	30
Frances Eberhart	42
Clothes for Work and School	44
The Library and Reading	46
The Great Depression	47
The Blackhawk and Jazz	48
The Sea Scouts	50
Bill and Helen Andrews	51
Memories of Clipper Ships	56
Michel Lafaurie and Fishing Adventures	58
Memories of Hunter's Point and China Basin	60
Vic Sharp and Al Christopherson, Scout Leaders	62
Rebuilding Camp Roy-a-Neh	63
Working at the Crescent M Camp in the High Sierra	66
Working at Yosemite Park, 1937, 1938	70
Working as a Printer's Devil	75
Galileo High School	77
Opportunities During the Great Depression	89
Galileo, a High School for Science	90
The 1939 World's Fair and Beginning of Maturity	94

II	SAN FRANCISCO JUNIOR COLLEGE AND THE UNIVERSITY OF CALIFORNIA, 1937-1942	98
	San Francisco Junior College, 1937	98
	Father's Help for Polish Refugees	108
	Taking the Cuneo Family to Yosemite	109
	The University of California, 1940, a Different Level of Education	110
	A Combined Mechanics Course with Professor DeGarmo	113
	A Successful Stint as a Tutor	114
	Laboratory Assistant to Professor Richard Folsom	117
	Three Influential Women: Nauta, Lane, and Woertendyke	118
	Professors Larry Marshall and L. M. K. Boelter	121
III	MIT RADIATION LABORATORY, 1942-1945	126
	Getting Oriented as Number 504	126
	"The Biggest Block Party You Ever Saw" in Hamtramck	129
	Sailing the Transpac Race, 1939	133
	Earlier Work as a Laborer for Barrett and Hilp in San Francisco	133
	The Excitement of the Rad Lab	139
	James Lawson and Jerrold Zacharias	143
	Luis Alvarez Requests an Antenna Design	144
	Two Months of Crammed Education in Radar	146
	Three Months to Provide Radar 582 for the Panama Canal	148
	Marblehead and Yachting with Charles Francis Adams	150
	Elizabeth Blaney	154
	Fran Hagerty, Builder of Radomes	157
	Designing the Base for Radar Antennas--a Free-Wheeling Operation	158
	Contributing to the Design of Glide Control Approach Radar	160
	Designing a Plan Position Indicator Console for Use on Ships	160
	The Importance of Handgrips in the Design	161
	Jerome Wiesner and Designing for Airborne Early Warning Radar	162
	Education Seminars	163
	I.I. Raab	165
	Help from Vannevar Bush	167
	Marriage to Doris Cuneo, March 1943	170
	Blaney Family Hospitality for the Reception and Honeymoon	171
	Sightseeing by Bicycle around Boston	175
	The Manhattan Project and Declassifying the Rad Lab, August 1945	178
IV	BUILDING UP A LABORATORY FOR GENERAL PRECISION LABORATORIES	182
	Converting the Manville Estate into a Laboratory	182
	A Startup Problem, Similar to that at MIT	184
	Working on the Pioneer Fast Film Developing Unit	184
	Return to San Francisco, 1949	187
V	RESEARCH ENGINEER AT UNIVERSITY OF CALIFORNIA, BERKELEY, 1949	189
	A Remarkable Change from New York	189
	The First Research Contract, Experimenting on a Pitot Tube	190
	Signatory on the First Basic Federal Research Contract	191
	Heading Up the Contract with the Office of Naval Research	192

	Sam Schaff, Key Theoretician	193
	Roxanne Anderson, Secretary and Olympic Champion	193
	Lecturer for Undergraduate Classes, 1952-1954	195
	Having the Class Design the Tests	196
	Fun Teaching Mechanical Engineering Design 106	198
	Al Hale, a Very Good Teacher	200
	Associate Professor, 1954	201
	Associate Director of the Institute of Engineering Research	201
	Governor Edmund "Pat" Brown Changed the Charging of Overhead	202
	The University of California Requires Research, Public Service, and Teaching	203
	Henry H. "Packy" Schade, Director of the Institute of Engineering Research	203
	Hans Albert Einstein, Carl Vogt, and Practical Jokes	205
	Leonard Farber's Mercedes-Benz and Another Vogt Trick	206
	The Loyalty Oath, Not an Issue for George Maslach	207
	Obtaining Signature Authority from Dean O'Brien	208
	A Bureaucratic Victory in Getting Contracts Approved	211
	Learning How to Operate a Research Establishment	212
	Sam Silver, a True Genius	213
	Making an Illegal Transfer of Funds to Save the Electronics Research Program	215
VI	FULL PROFESSOR OF ENGINEERING, 1958-1963	218
	Changing from a Research Engineer to an Academician	218
	The Story Behind the Double Promotion	219
	Solving a Gearing Problem at Mt. Hamilton Observatory	221
	Daughter Christina's Parallel Career	223
	Research on Drag on Cylinders	224
	Service on the Research Committee of the Academic Senate	225
	Alan Renoir and Rhesus Monkeys	226
	The Faculty Club and Networking	227
	Enjoying Serving on Faculty Senate Committees	227
	A Prize-Winning Presentation to the American Institute of Chemical Engineers	229
	Sputnik and Upper Atmosphere Dynamics Research	230
	Sabbatical Leave in Europe Sponsored by NATO-AGARD	232
	Lecturing in Aachen to the Top People in Aerodynamics	234
	Thirty Lectures in Six Months	237
	An Exciting Holiday for the Family	237
	A Quantum Leap into International Research	240
	"A Standard Berkeley Academic Family, Very Involved"	240
VII	THE COLLEGE OF ENGINEERING CHANGES ACADEMICALLY	243
	Dean O'Brien Sees the Need for Five Years and Research	243
	O'Brien Retires from the Deanship and the University	244
	Dean John Whinnery and Chairing the Dean's Coordinating Advisory Council	248
	Mechanical Engineering Department Chair Sam Schaff	250
	Chancellor Strong Offers the Deanship and a Triple Mandate	255
	Changing to a Quarter System: Problem with a Silver Lining	258
	Making the Major Decision	259

A Month Spent Reading Faculty Files	260
Learning How a College Operates	264
Writing a Manual for Case Preparation	266
The Retreat at Granlibakken, December 1963	267
VIII DEAN OF THE COLLEGE OF ENGINEERING, 1963-1972	270
1963, a Critical Year in Rarefied Gas Dynamics	270
Frances Woertendyke Eberhart and Administrative Changes	271
Rachael Stageberg, Administrative Assistant	273
David Brown, Director of Budget and Space Planning	274
Learning from Working with Chancellor Ed Strong	274
The Hearts Table at the Faculty Club	276
Recruitment and Advancement of Faculty	277
"Finding" Twenty-Three New Faculty Positions	279
Recruiting Engineering Students at the Community Colleges	280
An Important Report on Articulation of Community Colleges	285
Co-Dean with Roy Bainer of the College of Engineering at Davis	287
Changes in Curriculum to Accommodate Transfer Students	289
Computer Science, a New Engineering Activity, Contested by L&S	293
Reorganization of Other Engineering Curricula	294
Serving on the MIT Review Committee	295
Technical Advisor for the Department of Commerce	296
Twenty Years of Committee and Advisory Service to the Navy	297
A Jet-Set Professor, Going to Washington Many Weekends	299
The Chancellor's Coordinating Advisory Council	300
The Free Speech Movement	301
Mario Savio, Chemistry Student and FSM Leader	304
An Undercurrent of Factions in the University Administration	306
The Strong Influence of Engineers on the Campus	306
The Academic Senate Passes the "Time, Place, and Manner" Rules	307
A Challenging Conversation with President Clark Kerr	311
Achieving One Goal: Berkeley Engineering Ranked at the Top	313
Clark Kerr's Enormous Influence on Education	314
Maslach's Achievement in Building Faculty Appointments, Advancements	315
Activities with Students and the Engineers Joint Council	316
The Engineering Alumni Society	318
Increasing the Subscriptions of <i>California Engineer</i>	319
Changing ASUC by Getting Voting Booths on the North Side of Campus	320
Political Aspects	324
Making Changes in the Berkeley School Board	325
Political Contacts at the National Level	327
Dick Richard Folsom	327
Admiral Starr King	328
Herbert Holloman	328
Admiral William R. Smedberg	329
Paul Nitze	330
John Warner	330
McGeorge Bundy and Ford Foundation	331
S. I. Hayakawa	331
Bill Mailliard and Byron Rumford	333

	Work with the Ford Foundation	333
	President and Mrs. Lyndon Johnson	335
	Henry "Scoop" Jackson and EPA	336
	Lee DuBridge	336
	Advisor on the Supersonic Transport; an Unworkable Airplane	337
	Nomination as Director of the Environmental Protection Agency	339
	The Chancellor's Shadow Cabinet	340
	The Third World Movement; Activism Becomes Violent	350
	Recruiting Minority Students	359
	Look Magazine Features the Jet-Age Professor	362
	Working out a Pact with The College of Letters and Science	364
	More Engineers Receive the University Medal	366
	Difficult Decanal Decisions Which Could Not Be Delegated	367
	Changing the University Patent Policy to Reward the Inventor	371
	Nobelists at Berkeley	373
	The Faculty Club	374
	Working to Elect a Prestigious Berkeley School Board	378
	Doris Maslach a Member of the Berkeley Rent Board	380
	National Political Activity: Meeting on the Plane to D.C.	381
	Chairing the Shipping and Hovercraft Committee	382
	Serving on the Manpower Commission	383
	Vice President Hubert Humphrey Seeks A Scientist's Advice	384
	A Meeting with Secretary of State Clark Clifford	387
	Working to Bring About a Peace Settlement in Vietnam	388
	Adlai Stevenson, Not Decisive on Major Issues	389
	Bringing Nobelists Charles Townes to Berkeley	392
	A Recollection of Robert Kennedy the Day Before He was Killed	392
	"Dragging the Naval Academy into the Twentieth Century"	393
	Roger Heyns, a Wonderful Chancellor	397
	The Search Committee for a New Chancellor: De-Selection	398
	Chancellor Albert Bowker's Fantastic Reservoir of Knowledge	401
	The Triple Mandate as Dean of Engineering Was Accomplished	404
IX	PROVOST FOR PROFESSIONAL SCHOOLS AND COLLEGES, 1972-1981	406
	Superdean to Represent the Chancellor's Office	406
	Roderic Park, Provost for Letters and Science	407
	Furnishing the Office for Comfort and Friendliness	411
	Forming the College of Natural Resources	413
	Building a Staff	415
	April Roy, Secretary and Administrative Assistant	416
	The Academic Senate Does Away with the School of Criminology	420
	More Recollections of Nobelists Seaborg and Segrè	423
	Living with Security Clearances	425
	Charles and Frances Townes	426
	The Faculty Club Hearts Table	427
	A Disrupting Lawsuit is Brought Over Denial of Tenure	429
	Implementing Affirmative Action in 1972-1973	430
	A Major Civil Rights Report "Smothering Them with Numbers"	432
	A Time-Consuming but Effective Process Achieved 27 Percent	
	Minority Hires	434
	The Difficulty in Getting Women Chemistry Professors	435
	Getting State Funding for University Buildings and Equipment	437

Chancellor Bowker Changes Campus Funding by "Unleashing"	440
Colleges	443
Obtaining Funding for the Bechtel Student Center	445
The School of Social Welfare Gets Accreditation After All	447
The Work of the Budget Committee on Academic Personnel Matters	448
Improving Appointment Procedures in the Academic Personnel Manual	449
Learning from Experience the Power of the Carbon Copy	450
Advising Chancellor Chang-Lin Tien on Streamlining Procedures	452
Planning for Succession in University Administration	455
A Peaceful Recapture of a Building Where Students Were Protesting	457
Damage of the Worst Intellectual Type Done by the Protestors	
X VICE CHANCELLOR FOR RESEARCH AND ACADEMIC AFFAIRS, 1981-1983	458
A Memo Regarding Research: Fine, but Ignored	459
Academic Services: Libraries and the Computer Center	460
Mike Heyman and Giving Up Smoking	462
A Major Overhaul of the Computer Center with Stuart Lynn	464
The Academic Personnel Office	465
Al Bowker, Creative Administrator	467
Activities in Retirement: Sailing, Travel, Consulting	
XI EPILOGUE	473
On Problem-Solving	474
The Rise and Fall of Academic Disciplines Necessitate Reorganization	477
The Importance of the "Hold" Box	477
"It was a Great Ride"	
TAPE GUIDE	479
APPENDIX	
Maslach family tree	481
College of Engineering, Degrees Earned, 1939-1990	483
Doctoral Degrees Awarded in the College of Engineering, 1943-44 to 1975-76	485
Herb Caen, <u>San Francisco Chronicle</u> , April 23, 1971	486
Photo and headline from "Campus Report," June-July 1972	487
"Jet-Age Professors," from <u>Look</u> magazine, February 23, 1965	488
United States Naval Academy Academic Advisory Board, 1974-75	493
Delegation from the College of Engineering of the University of California, Berkeley, to the People's Republic of China, 1979	499
"History of the UC Berkeley Engineering Alumni Society," from <u>Matrix</u> , December 1978	501
UNIVERSITY HISTORY SERIES LIST	503
INDEX	515



## PREFACE

When President Robert Gordon Sproul proposed that the Regents of the University of California establish a Regional Oral History Office, he was eager to have the office document both the University's history and its impact on the state. The Regents established the office in 1954, "to tape record the memoirs of persons who have contributed significantly to the history of California and the West," thus embracing President Sproul's vision and expanding its scope.

Administratively, the new program at Berkeley was placed within the library, but the budget line was direct to the Office of the President. An Academic Senate committee served as executive. In the four decades that have followed, the program has grown in scope and personnel, and the office has taken its place as a division of The Bancroft Library, the University's manuscript and rare books library. The essential purpose of the Regional Oral History Office, however, remains the same: to document the movers and shakers of California and the West, and to give special attention to those who have strong and continuing links to the University of California.

The Regional Oral History Office at Berkeley is the oldest oral history program within the University system, and the University History Series is the Regional Oral History Office's longest established and most diverse series of memoirs. This series documents the institutional history of the University, through memoirs with leading professors and administrators. At the same time, by tracing the contributions of graduates, faculty members, officers, and staff to a broad array of economic, social, and political institutions, it provides a record of the impact of the University on the wider community of state and nation.

The oral history approach captures the flavor of incidents, events, and personalities and provides details that formal records cannot reach. For faculty, staff, and alumni, these memoirs serve as reminders of the work of predecessors and foster a sense of responsibility toward those who will join the University in years to come. Thus, they bind together University participants from many eras and specialties, reminding them of interests in common. For those who are interviewed, the memoirs present a chance to express perceptions about the University, its role and lasting influences, and to offer their own legacy of memories to the University itself.

The University History Series over the years has enjoyed financial support from a variety of sources. These include alumni groups and individuals, campus departments, administrative units, and special groups as well as grants and private gifts. For instance, the Women's Faculty Club supported a series on the club and its members in order to preserve insights into the role of women on campus. The Alumni Association supported a number of interviews, including those with Ida Sproul, wife of the President, and athletic coaches Clint Evans and Brutus Hamilton.

Their own academic units, often supplemented with contributions from colleagues, have contributed for memoirs with Dean Ewald T. Grether, Business Administration; Professor Garff Wilson, Public Ceremonies; Deans Morrrough P. O'Brien and John Whinnery, Engineering; and Dean Milton Stern, UC Extension. The Office of the Berkeley Chancellor has supported oral history memoirs with Chancellors Edward W. Strong and Albert H. Bowker.

To illustrate the University/community connection, many memoirs of important University figures have in turn inspired, enriched, or grown out of broader series documenting a variety of significant California issues. For example, the Water Resources Center-sponsored interviews of Professors Percy H. McGaughey, Sidney T. Harding, and Wilfred Langelier have led to an ongoing series of oral histories on California water issues. The California Wine Industry Series originated with an interview of University enologist William V. Cruess and now has grown to a fifty-nine-interview series of California's premier winemakers. California Democratic Committeewoman Elinor Heller was interviewed in a series on California Women Political Leaders, with support from the National Endowment for the Humanities; her oral history was expanded to include an extensive discussion of her years as a Regent of the University through interviews funded by her family's gift to The Bancroft Library.

To further the documentation of the University's impact on state and nation, Berkeley's Class of 1931, as their class gift on the occasion of their fiftieth anniversary, endowed an oral history series titled "The University of California, Source of Community Leaders." The series reflects President Sproul's vision by recording the contributions of the University's alumni, faculty members and administrators. The first oral history focused on President Sproul himself. Interviews with thirty-four key individuals dealt with his career from student years in the early 1900s through his term as the University's eleventh President, from 1930-1958.

Gifts such as these allow the Regional Oral History Office to continue to document the life of the University and its link with its community. Through these oral history interviews, the University keeps its own history alive, along with the flavor of irreplaceable personal memories, experiences, and perceptions. A full list of completed memoirs and those in process in the series is included following the index of this volume.

September 1994  
Regional Oral History Office  
University of California  
Berkeley, California

Harriet Nathan, Series Director  
University History Series

Willa K. Baum, Division Head  
Regional Oral History Office

## INTRODUCTION by Christina Maslach

It is a special pleasure for me to write an introduction to the oral history of my father's life and work here at Berkeley. Because of him, the Maslach name has become one associated with a long tradition of accomplishment and service to the Berkeley campus, and it is a family legacy that I myself am trying to emulate.

The family roots of this tradition go back more than fifty years, when both my father and mother were undergraduates at Cal. That experience was a special one for both of them, which forged a lifelong bond to the campus. They spent a few years living elsewhere, but soon returned to Berkeley when my father got a position in the College of Engineering--and they have been here ever since. Their life has been a classic example of the university family--my father was involved in research, teaching, and administration, while my mother was active in both city and campus affairs, particularly in the overlap between town and gown. And they raised a family of three children--myself and my two younger brothers.

So Berkeley has always been my home. Growing up in a university environment, as a sort of "academic brat," I had a special kind of childhood that probably propelled me towards my own career in academia. It was a childhood framed in various university events and university people, and filled with tidbits of daily life on the campus. Most memorable were the outcomes of the hearts games at the Faculty Club, as well as teaching pedagogy (if the students weren't paying attention in class, my father would, without missing a beat in his lecture, throw a piece of chalk at their shoulder--and his best shot was when two students were talking to each other, and the chalk hit one and bounced off the other). Some of this talk about teaching must have rubbed off on me because, unlike the doll play of my friends, my idea of fun was to line my dolls up in rows and "teach" them. At the end of the day, my family would go to campus to pick up my father from some mysterious "T Building," and my brothers and I would while away the time by rolling down the hill of the Hearst Mining Circle (a hill that seemed very steep at the time). On special occasions we would get to accompany him to the Richmond Field Station. And later, when my assignments at Berkeley High School required additional library resources, my father's stack pass became invaluable to me.

But because Berkeley was literally my backyard, it never occurred to me to go there as a college student--so I did not follow in the footsteps of my alumni parents. Rather, I left home to seek my academic fortune--first as an undergraduate at Harvard-Radcliffe College, and then as a doctoral student at Stanford University. But with the wisdom of hindsight, I note that I have indeed followed in the footsteps of

both my parents. I became a professor, just like my father, and I did so at the University of California at Berkeley, just like my father. But the content of his career, in terms of engineering and wind tunnels and rarefied gas dynamics, was never my interest--rather, it was the psychology interests of my mother. So I seem to have borrowed from both of them and to have then developed the unique blend that is mine as a professor of psychology, back home again at Berkeley.

I began my career here in 1971, as a brand-new Ph.D., so I am fast approaching my thirtieth anniversary as a faculty member. My father and I overlapped for about a decade, but we were in different parts of the campus so our paths did not cross that often. We were also careful to maintain separate spheres of campus life, to eliminate any suspicions of nepotism or undue family influence. When I visited Berkeley for my job interview, I was taken to the Faculty Club for lunch, and I remember seeing my father striding into the room and then doing an about-face and making a quick exit. As a young and naive assistant professor, I accepted many invitations for community service or participation in other events, not realizing until later that in some cases the interest in me was actually an interest in getting an "in" with my father.

The name of "Maslach" is relatively short and simple (as Polish names go), but it tends to evoke: 1) mispronunciation, and 2) the query "are you related to...?" In my early years on campus, the question was always, "Hmm--are you related to George Maslach?", and when I acknowledged that I was, I was then known forever after as "Big George's daughter." I knew I had reached an important milestone when the day came that my father was asked if he was related to that professor in Tolman Hall--and now he is just as well known as "Christina's father." So there is a great sense of family pride in what "Maslach" has contributed to the Berkeley tradition--and I am delighted that there is now an historical record of that first phase. I am especially pleased that the publication of this important book is occurring in the spring of 2000, so that we can celebrate this event as my father reaches his eightieth year.

HAPPY BIRTHDAY, DAD!

With much love and admiration from your daughter, Christina.

Christina Maslach  
Professor of Psychology

March 2000  
Berkeley, California

## INTRODUCTION by Karl S. Pister

I first met George Maslach more than half a century ago. It is my recollection that he was a research engineer working on low pressure aerodynamics at a facility located at the site of the old College Avenue pool--long abandoned as a swimming pool but used by the College of Engineering as a research site. George moved from that position to an associate professorship of Mechanical Engineering, beginning a long and distinguished career as a faculty member and later as an academic administrator at Berkeley. He shared with his predecessor, Mike O'Brien, a characteristic that would be seen as most unusual in the academy today--neither had a doctoral degree. That notwithstanding, these two deans of Engineering were instrumental in building a college and shaping its direction in two critical periods of Berkeley's history. While Dean O'Brien faced the task of creating a post-World War II academic unit at a time of enormous growth in student population, George Maslach steered the college through the war at home--the Free Speech Movement and Cambodian Spring--reactions to the war in Vietnam.

On two separate occasions during the nearly forty years while we were both active at Berkeley, I was in the "academic chain of command" (if that term can be imagined at a university), with George as my senior. An anecdote from each of these periods serves to describe the kind of academic intuition and vision that he gave so generously and effectively to the campus. In neither instance, at the time, did I share or appreciate his understanding or insight.

As noted in this oral history, the post-World War II College of Engineering evolved from a single-department college with disciplinary-based divisions of engineering into a multi-department college. Two of the large departments, Civil and Mechanical Engineering, were then comprised of distinct, intra-departmental divisions. This organizational structure served the college well in building robust, sub-disciplinary research and graduate programs at the expense of a broader departmental identity. To his great credit George sensed the need to return to a more integrated departmental structure by abolishing the divisions. This he did in Mechanical Engineering but he was unsuccessful in Civil Engineering--I, among others, was his chief opponent. It was a decade later (when my role had changed from faculty member to dean) that I realized that his decision had been the correct one, given the evolution of the practice of engineering and the need for more coherent undergraduate programs.

The second incident occurred when George was founding Provost of Professional Schools and Colleges and I had just accepted Chancellor Mike Heyman's invitation to be Dean of the College of Engineering. I walked into George's office in California Hall to share my decision with

him. Without hesitation, he remarked, "Your challenge will be to secure endowed chairs for the college." At the time I scarcely knew what an endowed chair was, let alone how to go about securing one. Little did I realize how right he was. It turned out that endowed chairs were just the beginning, for I had to secure funds for a building as well. How was this possible? Provost Maslach, looking to the future as was his bent, had seeded the college with funds to hire a development officer at the same time I became dean. Thanks to George it all fit together. The quality of faculty and students was beyond question. The alumni were extremely supportive and ready to help with fund raising. Who made this possible? In his former role as dean, George had gained the FTEs [full-time equivalents] and got the faculty appointed; he had personally visited community colleges to urge the best students to transfer to Berkeley, in conformance with the California Master Plan for Higher Education; he was the dean who founded the Engineering Alumni Society, whose membership formed the cadre for the Berkeley Engineering Fund, which in turn was instrumental in assisting my development officer, Marily Howekamp, and me, to secure twelve endowed chairs and the naming gift for Soda Hall during my tenure.

The unseen hand of "Big George"--I am not aware that this term was ever used to address him directly, but it was a common way of referring to the dean among faculty--steered the ship of the College of Engineering and later the Berkeley campus through stormy seas, adding great value to its cruise, to employ a metaphor that reflects yet another side of his adventurous life.

"If you would seek his monuments, look around you" are words spoken at a different time of a different leader. Future generations of faculty and students will benefit from the "monuments" created at Berkeley by George Maslach. I count it a pleasure and privilege to have worked with him.

Karl S. Pister  
 Vice President - Educational Outreach,  
 Office of the President  
 Chancellor Emeritus, UC Santa Cruz  
 Roy W. Carlson Professor of Engineering,  
 Emeritus, UC Berkeley

March, 2000  
 Oakland, California

## INTRODUCTION by Chang-Lin Tien

It is with pride and respect that I offer this brief introduction to the oral history of George R. Maslach. My association with George began with my joining what was then called the Heat Power Systems Division of the Mechanical Engineering Department in 1959 as a junior faculty member. George was then chairman of the Aeronautical Sciences Division, one of four divisions in Mechanical Engineering. From the very beginning I was impressed with his acumen as a departmental leader. In a time of much divisional faculty strife, he was always fair-minded and reasonable and showed great skill in dealing with touchy intra-departmental issues and personnel battles. In particular, he showed great interest in mentoring junior faculty members and this interest had a very positive influence in the formative years of my academic career.

The only faculty member without an advanced degree, George nevertheless went on to rise to the top as Dean of Engineering, as Provost of Professional Schools and Colleges, and as Vice Chancellor-Research. His sound political judgment, broad perspective, and strategic thinking were unusual among faculty, especially those in the hard sciences, and these talents served him well throughout his distinguished Cal career.

In time, the Heat Power Systems Division tired of receiving misdirected phone calls complaining about heating problems on campus, and renamed itself the Thermal Systems Division. As division chair beginning in 1969, I worked in close association with Engineering Dean Maslach until he moved on as provost. A legacy of his deanship of personal significance to me was his successful push to eliminate the divisional structure and to unify the faculty into a single Mechanical Engineering Department. The rapid rise in reputation and stature of Berkeley's Mechanical Engineering during the last twenty years is very much a result of this organizational restructuring, although at the time this restructuring met considerable faculty resistance, as in most cases of academic reorganization.

For a time, when I was department chair and he was provost, our interactions were infrequent. But we renewed our close association when I was recruited in 1982 by Chancellor Mike Heyman to be faculty assistant to Vice Chancellor Rod Park, and I began working closely with George in his role as Vice Chancellor-Research. Again, he became my mentor and later, my immediate predecessor in that position, and I have always been grateful for the advice and guidance he provided me.

I must also state my great admiration for George's impressive family. Doris has been an inspiration to many in the town and gown arenas through her numerous activities and extensive involvement in

Berkeley community affairs, in particular as a member of the Berkeley Rent Board. Their son, Steven Maslach, is an accomplished glass artist in the Bay Area. I have also long appreciated daughter Christina Maslach's brilliance and have admired her stellar professional achievements. It was my pleasure to work with her when she served as faculty assistant on the status of women during my tenure as chancellor. In sum, it has been a great privilege to know and work with this remarkable Berkeley academic family.

Chang-Lin Tien  
University Professor  
NEC Distinguished Professor of Engineering  
Chancellor, 1990-1997

December 1999  
Berkeley, California



## INTERVIEW HISTORY--George Maslach

When I was asked to work with George Maslach on his oral history, I was apprehensive and intimidated because his career was in aeronautical engineering and university governance, whereas my expertise was in mining engineering and mine management. Furthermore, this oral history was to take its place in a series of fine oral histories already completed with former Deans of the College of Engineering: Donald McLaughlin, interviewed by Harriet Nathan; Morrrough P. O'Brien, by Marilyn Ziebarth; and John Whinnery, by Ann Lage. In the end, of course, I should have realized that George Maslach was a professor of engineering before he was dean, provost, or vice chancellor, and so he knew how to lay out a well-ordered account, make it intelligible to the rankest beginner, and follow it step by step to its conclusion.

One of the unanticipated pleasures was the extent to which George Maslach, a voracious reader and man of wide-ranging interests, was able to place all of the major periods of his life in their large historical and social context. He spent the first hours of the interviews evoking the spirit of the San Francisco of his youth, when artesian wells bubbled up among sand dunes in what is now Civic Center. Jazz at the Blackhawk, sailing on San Francisco Bay, Boy Scouting, the public library, the vitality of the Polish immigrant community and the diversity of Galileo High School, are all recalled in wonderfully rich detail as background to the story of his rise to the top of a great university. Similarly, he recalls not only his significant technical accomplishments at the M.I.T. Radiation Laboratory during World War II, but the excitement and the fun of Cambridge, Boston, and Marblehead, and as always, sailing.

His career at Berkeley falls rather neatly into decades, and again he gives not only the details but the full flavor of each period; the postwar campus which changed dramatically with arrival of more graduate students and transfers from community colleges; the period of student activism and revolt in which his diplomatic skills came into play; and the greater national scene when UC had become a pre-eminent research institution. This was when Look magazine featured him as a jet-age professor, and he was spending most weekends in Washington advising the U.S. Navy and other government bodies.

Eleven interviews were held, on 20 and 27 August, 29 September, 6 and 20 October 1998; and 19 January, 4 and 18 February, 4 and 18 March, and 10 November 1990. All interviews were held in the morning.

The first interview session was conducted at the "hearts table" in the Faculty Club lounge, his choice, because of the good memories of

card games played there through several decades. The room became impossibly noisy, however, and so next we met in one of the smaller dining rooms, which also proved impractical. Twice we interviewed in room 406 in the Cory Engineering Building, twice in the conference room of The Bancroft Library, and three times in the Strouse Room of the Bancroft, where he identified a recording problem as a 60-cycle hum from fluorescent lighting. We found optimum conditions for the tenth interview in study room 6-B of the Doe Library. The brief epilogue was recorded in an eleventh session in the Strouse Room.

In his introduction, Karl Pister reveals that George Maslach was known as "Big George" behind his back, and he is indeed very tall, even now when he is slightly stooped. He is thin, and agile except for stiffness from recent knee surgery and some back trouble. (We compared notes on lumbar 4, the problem vertebra which we have in common.) He has white hair, clear blue eyes, and dresses casually. I looked forward to seeing which beautiful sweater he would wear to each interview.

He came to the early sessions with packets of photographs but he seldom referred to any notes. He says that he has a photographic memory; quite clearly he had a mental outline which he followed for each interview. He spoke fluently and knew which topics he wanted to discuss and in what order. Occasionally, but seldom, he fumbled for a name or a date. I tried now and then to lead him into a byway, but generally I was unsuccessful. Historians of science and technology, higher education, and twentieth century America will all enjoy George Maslach's comprehensive and articulate recollections.

The introductions to the oral history were written by daughter and Professor Christina Maslach, former UC Santa Cruz Chancellor Karl Pister, and former Chancellor Chang-Lin Tien of UC Berkeley. Background interviews were held with colleagues Al Bowker, David Brown, Cline Garland, Ernest Kuh, John Whinnery, and Robert Wiegel. I met with Doris Maslach, who spoke movingly of the stressful years when her husband was provost and hardly ever at home; when there was time available, he needed to spend it working alone on his boat. She also spoke of the special challenges faced by "faculty children" in a university town.

The tapes of the interviews were transcribed in the Regional Oral History Office, lightly edited, and the transcript sent to George Maslach for review. He made several minor clarifications of diction and returned the transcript promptly. The manuscript was corrected and indexed at our office. Jim Kantor, University Archivist emeritus, who did the meticulous proofreading of the final transcript, spotted very few details with which he could quarrel. The tapes are deposited in The Bancroft Library and are available for study.

The Regional Oral History Office was established in 1954 to augment through tape-recorded memoirs the Library's materials on the

history of California and the West. Copies of all interviews are available for research use in The Bancroft Library and in the UCLA Department of Special Collections. The office is under the direction of Willa K. Baum, Division Head, and the administrative direction of Charles B. Faulhaber, James D. Hart Director of The Bancroft Library, University of California, Berkeley.

Eleanor Swent  
Senior Editor

March 2000  
Regional Oral History Office  
The Bancroft Library  
University of California, Berkeley



Regional Oral History Office  
Room 486 The Bancroft Library

University of California  
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name George S. Maslach  
 Date of birth 5/4/20 Birthplace San Francisco  
 Father's full name Michael S. Maslach  
 Occupation Machinist Birthplace Zolopane - Poland  
 Mother's full name Anna ~~By~~ Peczolowska Maslach  
 Occupation Seamstress Birthplace Krakow - Poland  
 Your spouse Doris Carol Maslach  
 Occupation Therapist Birthplace New York  
 Your children Christopher<sup>M</sup> Maslach, ~~John~~ Laurie Maslach  
Steven Maslach  
 Where did you grow up? SF - California  
 Present community Berkeley California  
 Education B.S. UC Berkeley - Engineering  
 Occupation(s) Engineer - Professor  
 Areas of expertise Mechanical Engineering - Fluid  
Mechanics - Heat Transfer  
 Other interests or activities Sailing - Photography -  
 Organizations in which you are active Richmond Yacht Club -  
Faculty Club  
 SIGNATURE George S. Maslach DATE: 3/21/00



## DEDICATION

A Good "Staff" at Home

Maslach: To me, this oral history is going to be most valuable when read by our children, their children, and their children's children. About the time I became dean, our family had a record of vacation in the high country in the Sierras, backpacking, fishing, skiing, doing a little bit of everything. And I realized during my career and after my career, that one of the greatest things I had was a good--quote--staff--quote--at home. Starting with my wife Doris, and children Christina, Jamie, and Steve. I really had total support, not in any explicit fashion, but it was always amazing how we could get together and not talk over engineering problems, but talk over global problems, and vacation problems, and so on, and come to agreement and have a very happy home life. It so happened that the deanship, for example, coincided with the period when the children were going through adolescence, twelve, fourteen, sixteen. This was of course a rough time in all families, a difficult time, really, but not a horrible time for us.

I always like to think that that support came in part from a statement that I once made on a backpack adventure where we were facing disaster. Three burros that we had, had dashed off somewhere with all of our camping equipment, food, and everything else. And we were searching for where those burros went. We found them rather quickly, but I at one point made the statement, "Don't worry, if everybody does more than their share, we'll have no problems." And I think that what has happened is, my family has always given me more than their share, and that's why I have had no problems. Okay.

Swent: That is a wonderful tribute.

Maslach: Well, it is really quite true. I have thought of it separately, and if I were to do this thing [the oral history] over again, I would shorten down various things a little, and I don't think I said enough about the wonderful times we as a family had. I know I talked about it a little bit in the sabbatical leave and so on, but you know, going to ski school in the Austrian Alps for example, that was great. [laughs] And doing all these kind of things: sailing, sailing a lot. I have some wonderful pictures of our grandchildren sailing. About three or four months ago, Steve and his family came down from Seattle and we went sailing. I got one picture of Dillon at the tiller and another one of Jamie at the tiller. I didn't pose them; these are all candid--but I got everybody in. And everybody who sees these pictures always makes very complimentary remarks. So we are now into the next generation.





## I EARLY YEARS

[Interview 1: August 20, 1998] ##<sup>1</sup>

### Family in Poland

Maslach: I hate to start off this great project with a note of sadness, but two days ago, August 18th, in the morning, Frances Eberhart died in Santa Barbara. I received the notification shortly thereafter. She was one of the long-time workers in the College of Engineering, and believe it or not, I met her first in 1941, when I was a student. She gave me my first paycheck when I was research assistant for then-Professor Morrough P. O'Brien, later Dean "Mike" O'Brien.

I have given to you two sheets of paper, which are histories of my family: my father's family and my mother's. My father was born in a small town close to the city of Zakapone. Zakapone is in the Tatra Mountains of Poland, bordering Czechoslovakia. Zakapone is well known as the site of the Winter Olympics after World War II, the only time that I think any Olympic activity was ever held in Poland.

Swent: Would you mind spelling that?

Maslach: Z-a-k-a-p-o-n-e. My mother was born in a suburb of Krakow. The name of the town is Sosnowiec. Sosnowiec is now part of greater Krakow and is not a separate city of its own. The area of Krakow, to bring it up to modern times, is close to the infamous camp of Auschwitz. Maybe twenty miles away from where my mother was born and raised.

Swent: Have you visited these places?

---

<sup>1</sup>## This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcript.

Maslach: I have not visited Poland at all, for a very strange reason. My passport was limited for years. I could not travel behind the Iron Curtain. My daughter, Christina, professor here in Berkeley, a professor of psychology, has visited there and has actually visited not only Krakow-Sosnowiec, but met with relatives, one of whom has now died, and also went to Zakapone, where she drew a blank and could not find our background there. The distance between Zakapone and Sosnowiec was only about fifty miles, Zakapone being to the south.

My father's name, M-a-s-l-a-c-h, if pronounced in Slavic tongue, would be "MASH-lak." In fact, you will often see it spelled in Polish-type literature with a slash through the middle of the "l," and that changes the pronunciation of the "l." The first part of the name, Mash, is "butter" in Polish. Therefore, my father was involved in a farm. The family was. But Maslach means "butter mushroom," and you can buy jars of *maslachy* in gourmet stores. A friend of mine actually sent me a jar from a store back in New York.

Also, you find the name spelled differently if it is, say, in Yugoslavia, and one of the biggest butter producers in Yugoslavia for many years was M-a-s-l-a-c, which is more the Slovakian spelling, and they turned out butter [chuckles]. They had these little golden wrappers for the butter, that you see in restaurants here, with their name on it, and next to their name was their logo, which was a little buttercup. And if you were up in northern Poland, for example, Maslach there means "buttercup."

Swent: The flower.

Maslach: The flower. So therefore I figure that my father and his family were involved in either the production or gathering or growing of mushrooms and harvesting mushrooms. This area where he came from is a very scenic area of Poland, and one of the things that makes it most scenic is the costuming of the people, both men and women, the women wearing a traditional costume: skirts with lots of ribbons in horizontal rows and kind of a red bolero. Of course, all decorated with beads and everything else.

The men's costume is very unique. It's made of wool, and much of the wool used is pressed wool. In other words, it's not woven. And things that you will notice are that the man wears a jacket, but he only has his left arm through the left arm of the jacket, and the right arm is free, and the coat sort of slings down the back, and there is a cord that goes from the right side of the jacket and holds it on him. In other words, he has one hand free.

Swent: Very interesting.

Maslach: I don't know the reason for this. I've asked many times and many people, but have never figured it out. The hat is broad-brimmed and flat and is like a skullcap on the top. It kind of reminds you of papal hats that you would see the cardinals and the Pope wearing. The brim has a lift up, very graceful. And then the pants are very tight. They're best described as what are called leggings today that women wear. They're form-fitting on the leg, all the way down to the ankle. Then whatever shoes or boots that are necessary for the time.

These men always carry what looks almost like a hockey club [chuckles], for field hockey and so on. It is actually an axe. You see pictures of this costume all the time, touting southern Poland. I think I might get there one of these days. I certainly would like to look it over.

Swent: Did your family have any of these kinds of clothing that they brought with them?

Maslach: No. Living in San Francisco, as I will be getting to, an important organization still exists in San Francisco, on 16th and Shotwell, in the Mission District, is the Polish House, or Dom Polski. Our family--my father especially--was fully involved in the various groups that use this former church for social events. Many, many times there were plays. In fact, it was a rather constant thing to have an evening in which you go and see this play, which is a traditional, old, you know, Polish play, and then after the play was over, moving the chairs back, opening up the dance floor, and there's a bar and you can buy a certain amount of food and so on. Of course, there were just dances where it's just dancing, but quite often there would be this social gathering. And in these plays, all of these costumes would be seen. In the dancing, for example, the Krakowiak, which is a dance, which is very fast and very physical, these costumes are a primary part of it.

But getting back to my father's family, we never were able to maintain good, close relationships with them by mail. My mother's family were politically active, something my father was here in the United States for many, many years. We were never quite sure whether our loss of contact happened in World War II, but people were disappearing right and left.

And the most recent example--kind of jumping up to a few years ago--was the name listed there [indicating the list of names] in my mother's family, the bottom name, I believe, died in

Poland. He was a labor organizer in the coal mines and steel industry, which is near Krakow.

Swent: Tadeusz?

Maslach: Yes. He was put into prison by the Soviets, who were in control then, and he just disappeared. Their family was told he died, so they know nothing. Those were the conditions. While I'm quite satisfied to know that my father in that area was a farmer, because that's all there was down there, my mother's family in Sosnowiec had the wonderful, difficult name Pszczolkowska. You can see the writing of it: P-s-z-c-z [chuckles]. There's no vowel, you will notice; but the combination of those five letters, P-s-z-c-z, gives a vowel-like sound to the enunciation. Her family was, as she always put it, minor nobility. Pictures we have of the family and so on show they obviously lived in a good house. Rooms were large and comfortable, wood panelled and things like that. And the people, especially pictures of mothers and grandmothers, they always looked more urban and more modern in dress and so on.

There's no fame in Poland. That is, if every noble had a dog and the dog sat in the middle of the noble's land, the tail would be wagging over the neighbor's land. In other words, nobility was not very rich. There were some that were very, very small. I don't know that my mother's family owned any great property. They lived in the city, Sosnowiec. But they seemed to be, for their time and for their place, fairly well off. Not well off by our standards, at all.

#### Immigrating to America, 1904

Maslach: So the story starts with the two families separately moving, during the great migration, out of Europe to come to the United States.

My father and his brother came to visit a relative who was living in the Polish community just south of Chicago. He stayed there for a while, but there was this enormous need for people on the West Coast, much like we had in World War II, for example.

Swent: This was in 1906?

Maslach: That's correct.

Swent: The early part of the century.

Maslach: Yes. But there was this great need to rebuild San Francisco.

Swent: After the earthquake.

Maslach: Just like Kaiser [Company] had trainloads of people to come to work in the shipyards in World War II, the very same thing was true after the earthquake and fire, and so there was a free ride to California. Many times I remember talking to my father, and one of the things, of course, that always stood out in my memory was something that he said that I heard from many other people as well. He said, "In Poland, they truly believed that in San Francisco you could walk down the street and kick up a pebble and look at it and pick up a nugget of gold." The streets had gold. And he says--he remembered this vividly. Of course, he was born in the eighties, but that was still a very lively topic of discussion and California, of course, was the land.

So when he had a chance, he moved to San Francisco. My father's schooling essentially ended somewhere like in the middle of high school. I don't think it was a full twelve years as we have here in the United States; more like ten years. And much of the latter time, in senior and junior year levels, was in a trade school. He was educated to be a machinist, so he had good ability with machine tools, repairing things, and so on.

Swent: What kind of machines would they have been?

Maslach: Well, they had the full complement of lathes and milling machines and so on. He knew how to use those machines, all belt-driven machines, of course. He was not a welder, but he did know an enormous amount about plumbing and carpentry, the type of trade school education that you would get, especially in a remote, rural area of Poland.

On the other hand, my mother--her education, the last year or so, was educated as a seamstress, and so she was very good with sewing machines and needles. In fact, we still have the original Singer sewing machine, which is a real antique. It still works perfectly. I remember her on that machine many times.

She came with her two sisters, listed in there, Peggy and Jenny. The statement there is my sister saying that my mother came with Jenny. Actually, all three came together. They came at a period, in their young teens, from Poland at the turn of the century all the way to California--they came straight to California. They had a relative here who lived, actually, on Poznan Avenue in Berkeley. Poznan is the name of a Polish city

[laughs]. I always thought that was rather interesting that he, as an old Polish immigrant, would be living on such a street.

I remember going to his house many times when I was young, and he would just take me to a back window and point, and there was the Campanile [chuckles]. So it's in the north side of Berkeley, more on the flat than up on the hill, but right near where the train used to go. He used to commute over to San Francisco.

Swent: How did your father feel about not finding the streets paved with gold?

Maslach: I think that he realized--he was a very sharp man--he realized that this was a mythology, but he did expect there would be greater job opportunities, and of course there were, enormously better than the steel mills where all my other relatives worked in the Midwest.

Swent: Chicago.

Maslach: Yes. I met many of them later. One, in fact, had risen from being a machinist in the steel mills up to a vice presidency of a steel company [chuckles].

Swent: He did well.

Maslach: Yes. Johnny was one of the best as far as moving ahead. A wonderful personality. Wonderful ability to get along with people.

But to get back to their coming, basically when they got here, separately, they were immediately put to work. Of the three girls, Peggy, the oldest, was always more of a--she always acted more as though she was better than the others and she was wealthier than the others or whatever. She was the matriarch of the three girls [chuckles]. Jenny and my mother--more of the opposite. They sort of hung together better, more. And I know my mother did go to work in a clothing firm, sewing. It's amazing to think how generations have done the same thing. This generation, you started sewing. Go to Chinatown today. This generation now is sewing.

My father, on the other hand, went to work, and he worked for Southern Pacific for a while. They had their big shops in southern San Francisco, but they also had other shops up in the city. I'd like to kind of digress from the people to pointing out something about how I remember basically another era, because the city, when they arrived, was just being rebuilt after the

earthquake and fire, and when I was born in 1920, it had been, of course, well rebuilt. But you have to remember that in those days--1920, let's say--the population of the state of California was three million people. Today's it's thirty-three million people.

Three million. Two million were down in southern California; a million were scattered up here in Sacramento, San Francisco, Oakland, and so on. San Francisco population was of the order of one hundred thousand, which is Berkeley today but spread over a larger region, or two hundred thousand at the very maximum. I remember in 1930, you could bicycle or skate out to the Sunset District, and for miles there was nothing but sand dunes. There wasn't a house. And if you took a streetcar to Stern Grove or Fleischhacker, for example, you'd go for miles through truck gardens, if you went one way, Visitation Valley; or you'd just go through these sand dunes for miles. And that was the kind of city we had at that time.

All big cities, of course, are divided into neighborhoods. In this period it was probably the heyday of ethnicity, even more so than it is today, because you had an Italian section in North Beach, and a Chinese section and you had a big Japanese section, a Jewish section, you had Polish, Slavic, Russian sections. The Russian section was out there in the Richmond District, where the two big churches still are.

#### Potrero Hill, San Francisco's Polish Neighborhood

Maslach: But the Poles, Yugoslavs, and others sort of settled around Potrero Hill, and the Mission District, that side of the Mission District. Remember where the San Francisco General Hospital is. That was essentially where the Polish neighborhood was. Dom Polski was just down the street, as I told you.

So I was born. We were living on Shotwell Street.

Swent: How did your parents meet each other?

Maslach: They met at the Dom Polski [laughs].

Swent: At one of the functions?

Maslach: Yes, one of the functions, of course, socializing and so on, so they met there. My father was about five foot eleven, strong, built like a fireplug. He was not stout, but he was very strong.

He was very gregarious. He was a good orator, and he always became the leader, the president of every society at one time or another that was there. I imagine he was considered a good catch because he had a job which was a notch up, a machinist.

My mother, on the other hand, was about five foot one, maybe five foot zero, to be frank. She was small, petite, never heavy. I resemble her physically, facially, more than I resemble my father. My brother, Michael, who was four years older than I, he resembled much more my father.

Swent: You are very tall.

Maslach: True. Of course, part of that is that we live in California and the climate is good, and the diet is very, very good.

Swent: How tall are you?

Maslach: Six foot four, a hundred and ninety-five pounds. I'm blessed with having a very fixed weight and skeletal frame. I've never dieted or anything. I've always been slender, when I was in grade school, my parents always wanted me to be heavier. I remember having to drink Ovaltine, things like that, to put on weight.

The three girls--my mother and two sisters--seemed to settle pretty well when they got here. Worked; they met people, you know, and then they got married. Jenny moved over here to Oakland and lived in Oakland.

Swent: Where did they live? How would three unmarried girls manage? Boarding houses?

Maslach: Boarding house, oh, yes. Everybody. Men and women. Boarding houses were everywhere. May I digress a moment because I remember boarding houses later on, even in the forties. Take Grant Avenue, North Beach. The Tivoli Restaurant is still there. I remember walking the street, and out of Tivoli came a man with a school bell, a hand bell that he rang in the middle of the street, and there were all these flats and houses, boarding houses, nearby, and people would come down. That was a signal for the first seating at the Tivoli. So they would all go in and have their meal at the first sitting. And then there was an hour and fifteen minutes, an hour and twenty minutes later, there was another ringing, and there was a second sitting. This was common, very common in San Francisco.

I remember seeing this even when I was younger, down in the Mission District. Potrero Hill, especially. Potrero Hill was an



interesting place. It had been, for good reason, an area where some well-to-do people built houses, but it kind of got run down, for a variety of reasons, and it became a second-class neighborhood. Now it's being gentrified again. The last occupants of that area, who are slowly being pushed out, are the small number of blacks, primarily those who came from the housing project on the side of Potrero Hill, and the Mexican-Americans. Recently there are a lot of gang rumbles there. In my day gang warfare was a pretty common thing.

Swent: Oh, really?

Maslach: Oh, yes.

So, getting back [chuckles] again, my parents got married and--

Swent: What sort of wedding did they have?

Maslach: I have pictures of the wedding. There is one picture especially in which my father and my mother to some extent were wearing costumes. It must have been a reception after the marriage ceremony.

##

Swent: There were no parents, of course.

Maslach: No. There were lots of friends. The party at the table was maybe twenty people.

Swent: Which church were they married in? Do you know?

Maslach: That I don't recall. I could find out, probably.

Swent: Was it a Polish church?

Maslach: Yes, it had to be, one of the churches in that area, and that's what I cannot recall. I remember going with my mother to St. Anne's, which was in the Sunset District, because, if you remember the Polish religion--I mean, the Catholic religion--saints days, which is your name day, are important, sometimes more important than anything else you might be dealing with. So I recall St. Anne's Day, going out there, walking in the procession with my mother and so on.

Swent: Your mother's name was Anna. When were your parents married?

Maslach: I was born in 1920. My sister is six years older. She, therefore, was born in 1914. They were--I've forgotten. I think it was 1912, '13. Good Catholics, they started a family.

Swent: I wondered whether the First World War had any--effect.

Maslach: It did have an effect, not so much--it had several effects, yes. But let me kind of lead into this more. They got married, and the thing that you have to remember is that everyone from Poland especially, and Europe, I should say, the whole theme was to move ahead, the American Dream. And one big part of the American Dream was to own property, so my father was a compulsive worker, and I think many times in his life he was holding down two jobs. Certainly during the Depression he did; I know that. So his skills were available, and he always had a job, never lacked a job.

We moved from Shotwell Street, which is an interesting street. I drove down it, oh, about a couple of years ago. Reminiscing again--I just happened to be in the neighborhood with my wife. We were seeing a play, a dance operation, which was off-Broadway type thing, way down on Shotwell Street. I said, "Oh, I remember this." [chuckles] I finally figured out which was the house.

Shotwell Street was an upscale street for that neighborhood because it was the only street in that area that had trees planted on it. Both sidewalks had trees the full length. Today about half the trees are still there. You can see where it was row housing, a lot of the same Victorian type things, not the best Victorians, but good Victorians. So that's where we were born.

Swent: They've lasted all this time.

Maslach: Yes. It's, again, an area which surprisingly is being gentrified right now. Shotwell is considered to be a good street. In my day, the south end of Shotwell Street, you were in the factories. The north end, of course, you were eventually into the farms. But basically that was a very interesting street to be living on.

### Childhood in the Mission District

Maslach: We moved from Shotwell Street to a house on Mission. Mission, of course, being the longest street there is in San Francisco; goes on for miles and miles. Our house was at the corner of Mission

and Army. Army is a main cross street. The house is no longer there because Army was widened, and they widened it on our side, for obvious reasons, and took out the house on that side. But it was a big house, and we shared two flats.

It had a very large garden. My father loved to garden. He would just be in the garden whenever he could. He loved to raise fruits and veggies. We were out in the garden. I even remember a picture in which I'm very young and pulling at a strawberry plant to see if there were strawberries in it [laughs], which I would pick and eat. But this was where I think--my memory kind of first starts on Mission Street. It was a neighborhood street, and this was the "Far Mission".

Swent: Was this still Polish?

Maslach: No, it is all Latino.

Swent: No, I meant at that time.

Maslach: At that time--

Swent: Were you still in a Polish neighborhood?

Maslach: I would broaden that to say that we were Slavic. We had an awful lot of workers. It was a working-class neighborhood, and it was close to machine shops, industrial activity, and it was close to get down to South San Francisco, which was heavy industry. I have memories of this which are really quite clear. For example, south from our house, across Army Street, was an enormous vacant area. Had been, of course, farming land. The exciting thing was that's where Barnum and Bailey Circus set up. In those days, there would always be the big parade through town with all the animals and so on, and they ended up practically in our front yard.

Swent: How exciting for a boy.

Maslach: I remember watching elephants being used to raise the canvas, you know. The big top went up with all these elephants. It was a great show. We went there, of course; as one of the neighborhood kids--I was young at that time--but I would follow my older brother and we would sneak into the sideshows or this or that, and they didn't mind. You know, the young kids in the neighborhood. I remember that circus vividly. It was, as I said, just across the street.

Swent: How exciting!

Maslach: It was not a wide street then. It was a narrow street [chuckles]. But there we rented. The whole thing was then to start getting property.

Swent: Did your mother work outside the home at all?

Maslach: At that point, my mother's work was in the home. If she did any sewing, she did it in the home. I distinctly remember, and I can even tell you and describe, for example, coats that she made, the winter coats. She would buy the material and, of course, the patterns and do all the work herself very quickly, very easily, surprisingly fast.

Swent: Did people come to the house for fittings, or were they sent out?

Maslach: These coats were coats for us.

Swent: Oh, for you.

Maslach: I remember having the fittings and so on. You know, she would start in the morning and by the time the afternoon was finished, why, you had a coat.

Swent: Oh, my. She was very good then.

Maslach: Surprisingly fast. And right to old age. She was very good with sewing.

We had sort of a bucolic, farm style of living at that point, with that big, big yard in back. I mean, it was fifty feet long and thirty-five feet wide. The house had a thirty-five-foot lot.

Swent: Did you ever have chickens or anything--

Maslach: No, we didn't have chickens, but there were chickens in the area. All kinds of animals, in fact. You could hear cows and chickens all the time, roosters every morning.

#### Father's Job at Leighton Industries

Maslach: But we moved because my father got a very fine job, which he held essentially for the rest of his normal working life--he continued working right on till he died--but there was an organization known as Leighton Industries: L-E-I-G-H-T-O-N. I think that's the way it was spelled. Mr. Leighton, who became a good friend

of ours, and his family--they lived out in St. Francis Wood, in a big house--he had about fifteen restaurants and what were called in those days "Dairy Lunches". In other words, it was a small cafeteria or short-order type place that you would walk into and pick up a breakfast or lunch or dinner.

Well, I don't know how he found out about my father, but--maybe he was called in to do some work for a friend of his or something like that--but my father could repair any of those equipments, and these were all big restaurant equipments and, of course, the plumbing problems you always have in restaurants, and then electrical. So he was the maintainer of all of these equipments on these restaurants. There was one, for example, a Leighton Dairy Lunch down by the Ferry Building, a big restaurant on Fifth and Market. There were others further up Market Street. There was one on Golden Gate Avenue and Larkin, just two blocks from where we lived, later, and one down on Eddy Street. So they were all over the downtown.

Swent: How did your father go to work?

Maslach: Well, the headquarters was the main restaurant down on Fifth and Market, which is where Eddy Street comes in and Powell, right there where the Powell turntable is. And this is what changed our life because we moved from the Mission District, and the first place we moved to was a place on Baker Street, which is fairly close to Lone Mountain, right up on the slopes of Baker, on the northern end of Baker, where it ran into the old cemeteries. We had a flat, and we were renting. We used to play in the street. It was Turk Street, up against the cemeteries there. Sand would blow from the cemeteries onto the streets, and the cars would not be able to use the street much because there were always these sand dunes.

I recall one day, just beginning school age, and we were playing stickball, batting the ball, and somebody hit this ball into the sand dune area on the side of the cemetery, and there were some shrubs and scrub, so I ran after the ball and oops! There was a dead man.

Swent: Oh, my.

Maslach: A gun was in his hands, a big hole right in his chest. He had been there for some while. I got out of there [chuckles] and called everybody over. "What do we do?" [laughs] One of the kid's family lived on Turk, and we all ran over there and told the mother. The mother came over and looked. Not everybody had a telephone in those days. You had to find somebody with a telephone and call in the cops, and they came. In those days,

the cops wore the long, tunic-type coats that came down to their knees. They had the old round-topped hats, really old-fashioned [chuckles]. I remember the cops there, and answering questions. I said, "I just went in for the ball." [chuckles] "In fact, here's the ball." We got the ball. So this was sort of an area where I started developing friends and going to school.

Swent: Which school? Where did you start school?

Maslach: There was a school on Golden Gate Avenue, one block south and about two blocks over.

Swent: Was this first grade?

Maslach: Yes, first grade.

Swent: Or kindergarten?

Maslach: No kindergarten.

Swent: Did you speak Polish in your home?

Maslach: I'm glad you brought that up because in the beginning we did speak Polish in the home when I was very little.

Swent: Your parents spoke Polish to each other?

Maslach: Yes. But at one point there, my father just made the decision that it was wrong for us to be speaking so much Polish because we were speaking with a very obvious accent when we spoke English. He says, "We are now Americans." He and my mother continued--and every once in a while we would say something in Polish, but from then on he said, "English."

Swent: How did your parents learn English?

Maslach: I never found that out, really. Both my father and mother spoke excellent English.

Swent: They must have gone to night classes?

Maslach: They might have gone to night classes, although I never heard either of them say that. They were very linguistic, especially my father. You mentioned the World War, did that have an effect.

Swent: World War I.

Maslach: World War I. And it did because my father was sort of prominent in the society, several societies, was well known for his

linguistic ability. He spoke Polish and English very well, but he also spoke Russian very well and any number of Slavic languages from the southern part of Europe. In fact, he used to brag to me that he could listen to a man speaking and tell you roughly where that man came from, by the linguistic differences in the basic Slavic language, because there are all kinds of dialects. I mean, in Croatia, Bosnia, and so on, it's not one language, really. It's almost by district, you know. So he was very well read.

In fact, I have a little book of his, in Polish, which he carried when he came from Poland, a little, tiny pocket book that you would slip into your pocket if you're on an airplane ride today and he would read these essays. I always remember that the part that was most used and thumbed was an essay, "My Brother," so probably it referred to the brother, who stayed, because basically, as you could tell, we're dealing here with families coming from Europe, and the reason they're coming is that with the primogeniture type of operation in Europe, any of the younger children would have to leave, so he was one of the younger children. So was my mother [chuckles]. So they just left.

Swent: So they did both learn good English.

Maslach: Oh, yes, excellent English. I'll speak to this more and more.

Swent: Before you started school then, you did know both English--you had already learned English before you started school.

Maslach: Oh, my mother was dedicated to our education, and my father, of course, knew we were going to college. This was, of course, the great dream of all this society. My father, in fact, spelled it out that the two sons--one should be a lawyer and the other should be a doctor. Boy, isn't this standard thinking! Of course, the daughter, forget it.

Swent: She might marry a doctor or a lawyer.

Maslach: But it was never in the plans. But just sticking with the period there, my mother would go to school and buy used textbooks, beginning textbooks, so even before I was in the first, second grade, I was reading textbooks. And, of course, I had a brother four years older and a sister six years older, so I was that last sibling.

Swent: Were there just the three children?

Maslach: What happened was that in 1918 another child was born.

Swent: One who dies.

Maslach: One who dies, Stanislaus, Stanley. The flu epidemic.

Swent: That was the other effect of World War I.

Maslach: Yes, that's the other effect of World War I. Years later I learned from my mother directly that I was the spare. They decided to have me because of Stan dying, the whole concept of "an heir and a spare" type of a thing, so my being born was an afterthought. If Stanley had lived, I was not in the picture at all.

Swent: That's interesting, too, because that brings up the issue of family planning, which must have been--

Maslach: They were, quote, "good Catholics," but just as one of the top people, laymen in the Catholic religion that I met in Austria, oh, twenty years ago, when I was doing consulting--so I asked him bluntly, "How come Austria, which is a Catholic country, has an absolute flat population?" Birth rate equalling the death rate. In fact, there's no migration in or out, basically, in Austria. He looked at me; he said, "The pill." Obviously, children were born, two years apart--BING, BING--two children, you know? Obviously, there was Planned Parenthood or something.

So with my being born [chuckles] as the spare, you know, and the concept, still, of primogeniture, my brother was the favorite son, and I was able to get away with murder and do things on my own to a far greater extent than he was.

Swent: It didn't matter so much?

Maslach: No. He was a very good student, scholarship student and everything else, and he became a lawyer. But here's a small story which will come up later again: when I became dean, it was impressed upon my mother by other people that this was a magnificent position, that I was some sort of a high-level person here at the university. And she said, "If Father were alive today, okay, you didn't become a doctor, but I think he would appreciate this." Would have approved of my being dean. [chuckles]

There was a period when my brother's wife, when asked about me, would say, "Oh, he does something over at the university." And she knew nothing about it. So finally, one day a student told her, "You don't know what you're talking about!" He told her all these things, and she never knew!



Well, getting back, as I said, this is where I think my childhood jumped from being in the family to being now with neighbor children. Playing in the streets and so on. And we visited people. A Greek couple lived down on Baker Street a few blocks away. We used to love to go down there because they were such a wonderful couple, such wonderful people.

### McAllister Street and the Benedettis

Maslach: And then we moved to a better flat on McAllister Street, right near where the car barn for the Market Street Railroad was the Green Cars, in those days. It was only three or four block move from where we were living, but this was a big family, the Benedettis. They ran a big coal and wood sales program. We lived above the coal and wood yard in the top flat. There were two or three male children and Esther, the daughter, the older daughter. And a big Italian family.

This is where I have great, great memories because I'm now in school and walking to school just about three or four blocks and working and playing with these people. There were also horses. Horse and carriages were quite common.

Swent: Still? In the twenties?

Maslach: I remember in Mission Street seeing "Sunny Jim" Rolph, mayor of the city, going by on Sunday morning, horse and buggy, top hat, formal. You've seen pictures of him, maybe. This was the way he dressed all the time. You know, the swallowtail coat and pants, formal pants and so on. And just a few blocks away from us, on Mission and Army, was--I think the place was called Woodward's Garden. There was more than one of these places. Big areas, two or three blocks square, beautifully landscaped, with trees and shrubs and so on. Dance halls, bowling alleys, picnic areas, a band playing. Quite often more like the German "oompah" band. And you would go there for Sundays.

And you were out in the country because these places were really the edge of the city, and this great palatial home that you would see right there. It was just surrounded by country, you know, and wonderful landscaping around the house. It was Rolph's palatial residence. And he went from that residence down to City Hall in a horse and carriage.

Swent: Oh, for heaven's sake. I asked earlier, how did your father go to work? How did he get around?

Maslach: Well, the trolley system in San Francisco was extremely good. There were two companies: the Market Street Railroad and the MUNI. The MUNI was kind of a dull grey car and was prominent on Market Street and then it branched off. Geary was one of the main streets it branched off on. But it also went up to Duboce and went through the tunnel. Now we're getting into another area, you know, the Upper Mission. Eventually, of course, the cars went with the tunnel through the Twin Peaks. So the trolleys were used, and used heavily. There were no buses at that time.

There was big rivalry. On Market Street there were four tracks: two going to the Ferry Building and two leaving. The inner tracks were the Market Street Railroad, and the outer tracks were the MUNI. And these cars would race down. It was worth your life! And cars came quickly, too. It was very well done. We had a very good transit system, believe it or not. For example, when we were living out there in McAllister, all he did was take the trolley and he would go maybe two miles and there is Fifth and Market.

The thing I really remember about the Benedettis was that they made wine. Of course, this was the Prohibition days, and theoretically, if you read the law, you can only make as much wine for yourself, for home consumption. I have vivid memories, to this minute, of sitting on the stacks of coal--you know, these are bags, hemp bags. And I would sit up there on those bags and watch all the adult men working, making wine. What they did was they would stack the bags of wood and coal in such a way so that behind them was this great, thousand-gallon vat, so you would have red wine. They would bring the grapes in with their big coal truck. They would put an edge of coal bags on the truck filled with coal, and in the center would be a couple of tons of grapes. And so they would back the truck down, and they'd be taking off these boxes of grapes and putting them up to the press where they would be ground, and they would make the wine.

Swent: They made it right there.

Maslach: In fact, they sold it, illegally, to anybody that was a customer. And also, they made good wine. They would sell it to restaurants and so on.

Swent: Did they bottle it?

Maslach: They bottled, but it was always in bulk. I never remembered anything less than a gallon. The big demijohns were the main thing. Five-gallon, ten-gallon, covered with hemp. They would have this all in the center of the truck, and go to some place,

unload coal and wood and look around and then unload the wine.  
[chuckles]

##

Swent: You've been talking about the Benedettis and their wine operation, and then you went back after World War II?

Maslach: Telegraph Hill, 1950, everybody was still making wine. And so it was rather common to help people. I found out that the man next door was a very good winemaker, but he was getting pretty old, so I made a deal with him that we would buy the grapes, if he would supervise the operation. He had the vat and everything right in his basement. And so we ordered a ton of grapes. I was into the deal for a barrel of wine. Other neighbors were also in on it as well. The whole community, maybe eight of us, you know, just all had part of this wine. When the grapes came, why, we all hustled the grapes down and crushed them, and every night we would go down there. We had to push down the crust, the grape skins and the stems and so on that floats--you have to move it out of the top so that the oxygen can get in. It was a lot of work and, of course, drinking a lot of wine, you know. I was doing this even when I was thirty years old.

Swent: But it was above board then.

Maslach: Yes. Of course, everybody would dump their grape residues, and in San Francisco, especially the North Beach area, down around the empty lots and on the waterfront there would be tons of these pressings.

Swent: This is back, now, in the thirties that you're talking about.

Maslach: Not only the thirties but in the fifties. And it smelled to high heaven. It would attract flies and so on. This was all done at night [chuckles] so nobody knew who dumped that particular batch of pressings.

Swent: I was thinking--the Benedettis' operation, you must have been able to smell this wine making, couldn't you?

Maslach: Well, yes, I'm sure you could. However, you have to remember, it was a coal and wood operation there, and you could smell the coal dust and the wood, too.

Swent: As well.

Maslach: As well. Finally, the one thing that--you know, I mentioned horses. There were horses everywhere. I mean, the rags-bottle-

sacks man, even up to the forties, up to World War II, would come around with horses, buying paper, magazines, bottles, rags. Sacks was the big thing. A lot of merchandise was moved with hemp sacks. So we stayed there with the Benedettis. This was a big family. You know Italian families. Every Sunday there is this enormous meal. You just couldn't believe the amount of food that was cooked, especially in a big family.

I had started in school. Of course, my brother and sister were ahead of me, so I was just kind of trotting along, not too many people paying much attention to me. I soon got the reputation for being a wanderer. I hiked a lot when I was older, but even when I was young, I would be all over the city. For example, in the cemetery area. We used to go up to Lone Mountain and get wooden barrels, and we would roll them up the hill, the ends of the barrels being knocked out, and you would roll down the hill.

Swent: In the barrel?

Maslach: In the barrel. It was all sand. Just enormous amounts of sand in this area. You would play in that area. Up on Lone Mountain you could see a lot further, you know, and other places to explore. My brother being older, he was a bit of a wanderer too. We just hiked around a good deal in those days, starting at that point.

Swent: Did you inherit your father's mechanical interests?

Maslach: I'll get to that. That's a very special part of my upbringing, so to speak. To finish sort of the Benedettis, it was I think where I went from family in the Mission District to the family with neighbors, playing, then Baker Street, now the family in a social kind of a sense. In other words, we were two close-knit families, living in the same house.

#### Father's Political Interests

Swent: Were your mother and Mrs. Benedetti friends?

Maslach: Oh, yes. Everybody was friendly. My father and mother were outgoing people, my father especially. Before I get too far along, I want to get back into the period which you asked about which was World War I. I told you my father was quite gifted linguistically. Since he was well known as president of various groups in the Polish society there, his name was prominent.

Swent: What were these groups?

Maslach: Well, sort of different groups that you would have in any kind of club arrangement today. There was an interest group in dancing, maintaining the knowledge of the different dances and so on. There was always an interest group--he was heavily involved in the plays and the literature. I was, even as a young boy, reading Sienkiewicz and others. *Quo Vadis* was something I read when I was very young. And so those were other interest groups within Dom Polski.

But then they became political groups as well. You have to remember the population was small. There were no blacks in San Francisco then. I truly mean you could walk across the city back and forth, any area, and there wasn't a black face. Chinatown, yes. Japantown, yes. Mexican-Americans, there was a small community in North Beach, which was at the end of Broadway. Their church is there, Catholic church, just where the tunnel starts on the Broadway side.

The city was very much an ethnic division city, as I said earlier. When we moved to McAllister Street, I didn't realize that just down about three or four blocks--more than that; I mean six blocks--it was heavily Jewish, and in the stores they spoke Hebrew and Yiddish. The signs were in Hebrew and so on. This will come out later, but I got to know Yehudi Menuhin [chuckles]. So we were very knowledgeable of the differences, but there was a very easy mixture, but every ethnic group had its political group. My father, since he was so prominent in all of these interest groups, became an active political person.

So in World War I, because he was a linguist, the army-navy people, the military people found out about him, and they came to our house. They had letters and documents they would ask him to translate. Somebody would be writing down as he translated these things. And some of these things were in strange tongues, as far as they were concerned, and they were not the major languages that they were familiar with. To what extent there was a surveillance, not as bad as World War II, where they sent the Japanese away, it was a surveillance of ethnic groups.

Potrero Hill, I remember had pictures in the restaurants showing these groups' meetings, big banquets, all men. Not a woman in sight. All big, handlebar moustaches, you know. These people all spoke Croatian or Polish. So he got this entree, sort of an official entree, into the government, if I would call it. So he became political.

In those days, Polish prizefighters, Polish athletes--you know, baseball; later, football; were prominent. And you would see all these names, but also you would see the Italian prizefighters and so on. Also the Jewish prizefighters. Oh, yes. There were some. But this was a way to move ahead and make money. Today the blacks, essentially, are using the same technique.

So I don't know where he really got prominent in the political activity, but it was during that period when we were living at the Benedettis'. He was sponsoring, or he was signing for various candidates, and we would meet various candidates. Uhl, who was a mayor way back in the thirties, my father sponsored him. And then later the mayor from North Beach, Rossi, he sponsored him. They would come to our house. So he had gotten into a sort of political mode, which kind of also rubbed off on me in later years.

#### Larkin Street Apartment House, 1929

Maslach: We then made the big move of life to our final residence, which was an apartment house on Larkin Street, 556 Larkin Street, between Turk and Eddy. We purchased the house in 1929. They had a big mortgage. So paying off that mortgage, twenty-year mortgage--they did pay it off before, in '49, but that was the thing. My father could walk down to Leighton Industries and do all those things. So he would pick up separate jobs, and because of his political contacts he had people, for example, Chauncey Tramontolo, San Francisco, a well-known judge and politician--he lived out there in Pacific Heights. And guess what? He knew my father was a handyman, so if something went wrong he called up my father.

#### Home Education Helping Father

Maslach: Well, at this point, nine years old, I was able to accompany him, so here became some of the home education which you didn't think about at the time but did affect me greatly because--my brother didn't do this. He was more active in sports and other things. He was a very good basketball player, first string, Commerce High. He was All-City soccer team, Commerce High, so he had lots of things going. And he was essentially able, because he was number one, to do *his* thing, you know.

Let me just give you a small example. Let's say a dairy lunch down there--you know, six blocks away--called up and there was a problem. Well, my father kind of knew what to bring in the way of tools, and we would go down there. I would carry a small toolbag, and he would carry a big one. And we would get down there and get to work and start fixing things. But every once in a while, he did not have a specific tool that he needed, so it was my job to run back home and get this tool. So I knew the tools; I knew the tool shop we had. My father had a very good shop in the basement of the apartment house.

The apartment house had twenty-three apartments, and we occupied the big one, and the other twenty-two were rented. My mother ran the house; my father worked.

Swent: You owned this entire building.

Maslach: Yes, we owned it.

Swent: Twenty-two apartments.

Maslach: Yes.

Swent: Big building.

Maslach: Especially in 1929 [chuckles].

Swent: Yes, huge.

Maslach: They had done very well while renting and had enough for the down payment and so on. But it was kind of tough because--

Swent: The Depression--

Maslach: I spoke right in the beginning that I--I'll repeat it now because I don't know if we recorded it--but I have always thought in my life that I happened to be in the right place at the right time, and the right time was during periods when major changes were occurring. My father and mother came during a great change; you know, the earthquake and fire. And then 1929 was the Depression. It was tough, you know. I remember that we were considered in the Polish community to be well off. There were several names of families we were compared to, a doctor, a dentist. We were up in that group. My father moved out of the working-man level.

But I remember a few nights over the years that I felt still a little hungry when I went to sleep at night. I guess things were pretty tough in that whole operation. We were in a nice little community there. I can tell you now that the grammar

school I went to was John Adams. It was on Eddy Street, between Polk and Van Ness. The building still exists, but it's being used for something else in the school district. I started there in the third grade. So it gives you some idea how we moved.

But getting back to the politics aspect of it, because this I think was very interesting: I met people because I went with my father. The Tramontolos and I were friends. I got a block on a name. That's why I'm starting to slow down. But I'll think of it. One of the families that we worked with later, one of the men ran for Congress. This was a time when our daughter, Christina, was quite young. I always remember they took a picture of the congressman, the man who was running, with Christina in costume and playing up the Polish connection [chuckles]. She still has the costume. Her daughters have worn it, but now they're twenty years old. But this was a long-time family in San Francisco. The man was in Congress for many years. He always asked for my father's support. The man was Bill Mailliard.

My father's support extended beyond that. By the time 1929 came around and we were down on Larkin street, he had already signed for Al Smith, and we had letters from Herbert Hoover and Al Smith, asking for support. All kinds of--a good friend, a man who came to our house, was Senator Johnson. You know, the famous Hiram Johnson. In fact, I had his nomination for the Naval Academy if I wanted it.

Swent: Well!

Maslach: That's another story, which I'll tell later. But we were very political. I mean, what we were doing in those early days there on Larkin Street--my father was president of a statewide Slavic organization, so this had large voting clout. So his name really meant something in that regard.

Swent: Did your mother play any part in this, too?

Maslach: Always in the background, always in the background. She was always socially there, but never spoke out.

Swent: There were not women's organizations.

Maslach: Oh, no, no. This is a different era. Don't kid yourself! But, for example, I remember we went down to listen to Paderewski play in the Civic Auditorium, which is an enormous hall, and after it was over, we went back to his dressing room, where I met Paderewski.



Swent: Wonderful!

Maslach: My father and he talked at length, Paderewski being not only a great musician but also the former president of Poland. We also met a lot of people through the music aspect. During the period I'm talking about, any way you could move, make money, and the first person who moved was, of course, Yehudi Menuhin, and he was down there on McAllister Street, you know. I remember we used to play basketball in the schoolyard of the John Swett Junior High School, which is on McAllister--at that time, right on the edge of the big Jewish community. And I remember Yehudi, who was not a sportsman or a player as a kid. You know, short pants. We all wore knickers and short pants. He came and he was there, and it was obviously his parents with him. He ran and grabbed a ball and did not really know how to handle a basketball. I don't think he jammed his finger of his bowing hand, but I later thought that if he had jammed a finger on his fingering hand, he would have been in real trouble. So an older person saw that and screamed and ran over and grabbed him and pulled him out [laughs]. And from then on, Yehudi was in private schools, and I never saw him again. I saw his sister every once in a while, Hepzibah, who was a very fine pianist, and she has made a career but nothing like Yehudi. But there were lots of other people. But his name was essentially the big name. And there was a period there where I can still remember, "If Yehudi can do this, you can do this."

My brother started violin first, and then I started violin. My sister was on piano [chuckles]. Oh, God! I studied violin for seven years, and I played in the Minetti Symphony Orchestra, which was a private orchestra in San Francisco. Private orchestras are very common in Europe, and this was the equivalent of a European private orchestra. It was good. Compared to San Francisco Symphony, which at that time was not good. I mean, we were second-rate, but so was the San Francisco Symphony, so we were considered good, a big orchestra.

#### A Philosophy about the Value of Time

Swent: Did you take private lessons?

Maslach: Oh, yes. Seven years. My brother became better than I. I kind of lost interest in it. One of the reasons was that when I was young--I don't know how I figured it out, but I adopted a philosophy that I should not be spending lots of time on things which took a lot of time to be good. To be good with the violin,

you truly have to practice four or five hours a day, and you can only do that with private schools learning, family situations.

This is true also in sports. One of my relatives, sister-in-law, Ann Curtis, great American swimmer, who held every record there was for many, many years--Olympics, three medals. I talked to her one day a few years ago. I said, "Gee, I'm really impressed. Our granddaughter has made the swimming team in her high school, and she swims an hour a day." Ann looked at me and said, "To be good, you've got to swim three or four or five hours." That's true of most anything.

And throughout my life, there were various things that I did--violin, as an example. But later I played golf for a little while here, but after I broke 100 and then I realized how much time you had to put in on it, I quit [chuckles].

Swent: You can't do everything.

### Religious Activity and Leaving the Catholic Church

Maslach: The thing also that happened--when we were in the Benedetti area and also downtown--was the larger religious activity. Born and raised in the Catholic church, the first church out there--it was near Divisadero, about a six-block walk from my house--we would go there. It's a church that just recently was dropped, deconsecrated. There's just no parish there anymore. Divisadero and Golden Gate Avenue. Holy Cross.

Then, when we moved downtown, just about four blocks away was St. Mary's Cathedral, which was then on Van Ness Avenue and O'Farrell--large, baroque, brick building. And from Van Ness Avenue, it was one of the most depressing things to see because there was literally a hundred steps up the hill to the church. The reason I mention this is because to this very day, I still remember coming down those stairs as one of the pallbearers, with my father's casket. And let me tell you, that was one scary operation! I just couldn't believe I did it.

But we became active (my mother pushing it) in the Catholic Sunday school. Of course, you then get involved in the altar boy operation. We were very straight altar boys, both red and white altar boys. This was the archbishop's cathedral. So we were heavily involved. This started, you know, when I was nine years old. I left the Catholic religion, on my own volition, oh, about 1935, '36.

Swent: You were young.

Maslach: Because I at that point realized that there was a basic dichotomy with religion and what I was beginning to see as my career, which was to be in the field of science--engineering, something of that order. I hadn't fixed on it, but I could see everything moving in that direction. When an Irish cardinal in Boston came out with a speech in which he ridiculed Einstein, who was coming to the United States, fleeing Hitler Germany, with the words--I still remember them--"This man bringing his pagan science." Well, there is nothing pagan about mathematics and physics and chemistry. And at this early age in my life, I just heard this. Fifteen, let's say. I was in Galileo High at the time--Galileo and the Inquisition. The church had not changed. And so I left the church.

And earlier than that, I started violin, at seven. Thirteen, fourteen--seven years, yes. I decided I was not going to be good, and therefore I should not continue doing it. The violin was not my first choice.

But these all came from that Depression period, 1929 through the early thirties. There were so many elements there that I recognize, still today. For example, I mentioned to you how ethnic San Francisco was, and still is. It's worth going, for example, to a Catholic high mass at St. Peter's and Paul's in North Beach, really, where they put on a show. Not as great a show as we put on in St. Mary's Cathedral, which was *the* thing. But if you want something ethnic, go to that Mexican-American church on Broadway, just above the tunnel. It's a little church. I used to go there for midnight mass when I was a teenager. Christmas. Man! You saw religion! You never saw it in the formality of the archbishop's cathedral.

##

Swent: We have had to move to another room, and so there was a little intermission here.

The last part that we got was where you were talking about going to the Mission church for a wonderful example of Catholic panoply, and then you said that you had settled on the Quaker faith.

Maslach: That was the decision I made many years later. But at that point in my life that I'm speaking about now is between the years when I was nine years old up to the end of high school, seventeen years old. But I made decisions to no longer maintain the

violin, and I also made a decision to leave the Catholic church, which is pretty good for a kid of that age.

Swent: It is! Quite remarkable, I think.

Maslach: So I was making decisions in an environment that--I'm trying to explain--was of a different era than we have here today. For example, during the worst of the Depression years, one of my chores was to walk to the Langendorf Bakery seconds shop. In other words, you could get day-old bread, because it was so much cheaper. The only cakes that we ever had for our birthday or something like that--you know, there were very, very few celebrations during those periods--was by buying the day-old bakery goods. That required hiking, round trip, about a mile and a half. And if you were going anywhere else, why, those days you used shoe leather. You didn't even use the trolleys that ran up and down Larkin Street. We were in a very good location for transportation.

So starting in Adams grade school in third grade there, all of a sudden, lo and behold, you developed a whole new set of friends. And you had to do this in a downtown location. The man who became my best friend was a man by the name of Michel Lafaurie, which is a French-sounding name but he was Basque. His father was in many respects similar to my father in that he was the head of the Basque community.

Just to further these comments about how ethnic we were in those days, Michel's father would take me along with Michel, and we would have dinner at, say, Des Alpes, a restaurant that still exists on Broadway Street, between Stockton and Powell. In those days, Sunday dinner was a dollar--less than that. Sunday dinner was a dollar in about 1940, so Sunday dinner was probably around sixty, seventy cents, and for that you got two courses, two entrees, and Sunday you would have chicken and then you would have a meat course, red meat, that is, as well. But you would always start out with soup and pasta of some sort, and you would always end up with dessert and, of course, the wine was part of the meal.

I remember very good restaurants in North Beach. Lucca's, for example. Big, large, popular place, in which a dollar meals--you ended up with a box of petits fours, which you would take with you as you left. This was the kind of era that I'm talking about, in which I walked into Des Alpes with Michel's father, who was a tall, dominating presence, and very quiet, and the owners of the place would immediately come up to him. It was almost like watching a film of the Mafia. They would come and bow to him, shake his hand and so on. And he was the one who settled

disputes within the community. In those days, the Basque community was right there in that Broadway-Powell area, and the hotel there. The Basque hotel was further down Broadway, but there was a Basque hotel right there on the Broadway and Powell. Still is.

After meals in some of these restaurants, all the sheep herders that were staying there would just go off in the room and start playing cards, so you would have this wonderful feeling of being in a family, you know, right there, so I went from an Italian family, the Benedettis, to a Basque family, the Lafauries. Other people that I knew there, people like Freddie Gomez, who was a short, active, handsome Mexican-American. He lived right down there in the Tenderloin. He was right there in the red light district.

You have to remember that Larkin and Eddy were apartment houses right on the edge of the Tenderloin, and so you walked through the red light district of San Francisco. The prostitutes and the pimps were very obvious all around you. This was the district. And one block away from our apartment house there was a big hotel, old hotel, and on the ground floor of that hotel was a gymnasium for the training of boxers, professional boxers. I would go down--you would just walk in and watch boxers training. There would be, of course, short fights on the rings there, too.

And if you walked the other way, down Eddy Street, there was another famous gym that is still in existence, in an old, old building. It's essentially one of the boxing gymnasiums of San Francisco. The district was very, very different from the Mission district of family and community surrounded by Polish people or McAllister Street with the Benedettis and so on. We were in the suburbs then, and now we were in the center of the city.

### The Central Library

Maslach: Three blocks away from our house was the central library. That was sort of a third part of my education. I found out very quickly, in the children's library room--you could get the card--and the maximum number of books you could take out at one time was four. I would take out four books, and I would go home, and four days later I was down there. I finished those, and took out four more.

Swent: What were you reading?

Maslach: Well, in the children's library, of course, you essentially had all kinds of children's books like *Mother West Wind* and so on, things of this nature, and a lot of other old-fashioned children's books. But as you got older, you got into the boys' books. You know, the Hardy Boys and Tom Swift and things of that nature. I remember winning an award--one summer they had a summer reading program in which you had to read certain books; then you had to write book reports. I got an award on one of those. I've forgotten whether it was because I read so many books or whether [chuckles] I wrote a good report. One or the other.

But I just lived in that library. Not just the children's room. I quickly found out that you could go upstairs here and get smart. This is the main library. And I learned about card catalogues. And I started moving into much more adult type of reading. And then if you go the next floor up, why, you got into the periodical rooms. Man, that was really something. Not just the newspapers but all the magazines. I'm talking every magazine you could possibly think of.

So here you've got this environment of, let's say, 1932. Twelve years old. Here you've got this environment of poverty and the Depression, and here I am--on one hand the church; I've got music; here I've got the library; here I had other friends. George Goodrich. His father had a big garage. In those days there were big garages for keeping cars inside. You just didn't park in the streets if you had a good car. That garage did work on cars but also kept cars.

#### Boy Scouts: Achieving Eagle Rank Very Young

Maslach: So there was a whole new kind of life, a very, very downtown life. You got into the next phase, which was very important for me, and that was the Boy Scouts. My brother was in the Boy Scouts, earlier, of course. So I joined immediately.

Swent: Who sponsored the troop?

Maslach: The troop was sponsored by the downtown Lions Club of San Francisco. There was a man by the name of George Johnson, who was our chairman, you know, of the whole operation. He was a contractor and house builder. He came quite often to meetings.

Before embarking on that, because that whole scouting aspect was a major part of my life; there was nothing else to do. This

is the point I want to make. You know, summertime is three months. What do you do as a ten-, twelve-year-old?

Swent: Were you doing any kind of chores around the apartment building?

Maslach: Well, I was working with my father, but during the day my father was having his regular job and it was only in the evenings that I would be going out with him. And yes, as I became older, I got into more technical chores. The first chore I had was to take the elevator up to the top floor and go down the back stairs, where people used a garbage chute down to the garbage can--but people would leave papers and magazines and things that would be gathered and taken down. Bottles, for example. So that was one of my chores. I would go down and I would wrap up and package the newspapers and the magazines and what have you, and would sell them to the rags-bottles-sacks man. Yes, we all had chores.

As I grew older, as I said, the scouting experience became a very dominant factor. I had not yet given up the violin but I soon did. I just moved extremely rapidly. I became a tenderfoot scout the first meeting, passed those tests. A month or so later I was a second-class scout, and about three months later I was a first-class scout, and could start on my merit badges.

Well, I won't bore you with a long story, but when I finished scouting, the merit badge part of it, I had sixty-one merit badges out of about ninety-nine available.

Swent: My!

Maslach: Twenty-one were required for this Eagle Scout badge, and I had those. Some of those were required badges, and some elective. And I received my Eagle Scout badge from Lord Baden-Powell, the man who started the Boy Scout movement.

Swent: Oh, really!

Maslach: He happened to be through San Francisco when we had one of our big jamborees, so--

Swent: So you were an Eagle very young, then.

Maslach: Oh, very young, yes.

Swent: That's remarkable.

Maslach: I just kept up with all sorts of things. One of the other things of the downtown living that was so wonderful was that about five blocks to the north was the Lurline Baths. This was a big

swimming pool. Of course, the upper floors, they had bathtubs and so on. You could go in and bathe and shave and stuff like that. But the big pool took its salt water from out in the beach, around Sutro, and pumped the water into downtown San Francisco. A lot of clubs still have those--that pipeline is still used by the Olympic Club, the Metropolitan Club for women, and on and on.

Swent: I didn't know that.

Maslach: Oh, yes. So at that point, when I went to Adams school, I began to learn something about money. Finance. To give you an idea: Twenty-five cents would put you into any second-class motion picture theater. If you weren't going to the Fox or Orpheum or Paramount, twenty-five cents would get you in, and those were double bills and so on. Twenty-five cents became kind of a goal. That was a standard for me. As time went on, as I told you, fifty cents was a good meal; seventy-five cents was a very good meal, and so on. Later, one dollar, when I was in high school.

I began to understand money, finance, and so on. One of the things I would do would be--every once in a while my mother, being rushed in work, she would give me twenty-five cents for buying school lunch in the school. Well, guess what? I went swimming! I did not have lunch [chuckles]. I became a very good swimmer at a very early age. And I continued with that. In American Red Cross I took the senior lifesaving certificate and then the senior first-aid certificate.

Swent: And you did this at the Lurline?

Maslach: Well, I did that at the Lurline and later at the Sutro. But the Red Cross thing was also downtown. My first-aid classes were downtown. We really learned, outside of the school, all these things. The scouting thing was the biggest part. I never went to a Scout camp as a young Boy Scout, paying to go to the camp, never. We didn't have that money, that kind of money.

Swent: Have you continued with scouting as an adult?

Maslach: Oh, no. Actually, it's a long story. It will come out.

Swent: All right. Okay.

Maslach: I'm just trying to pace myself [chuckles]. The Scout activity was very, very much a part of not only the social life but also the private family life. As I said, my brother and I were close in the sense of doing things. While he was four years ahead and therefore we did not talk about schoolwork so much, we did a lot



of things. Hiking was one of our best. Many a weekend we would pack up and go off on Friday afternoon and hike all of Marin County, Saturday, Sunday, and come back Sunday afternoon.

Swent: How did you get over there?

Maslach: Getting over to Marin County was one of the greatest, most wonderful experiences of the day. You would take the trolley down to the Ferry Building. As you went racing down Market Street, you would come to the Ferry Building, and there was a big circle where the cars would stop in front of the Ferry Building. You have to remember: two tracks down, two big circles, and then two tracks out. The thing to do, if you were just doing a daytime trip--and this was the most dramatic--was to go Sunday morning and the eight o'clock ferry to Sausalito was the ferry you got on. That ferry was big. No automobiles. Just foot passengers.

Swent: Do you remember how much it cost?

Maslach: Oh, yes. About two bits, twenty-five cents. That ferry was jammed. I mean, I'm talking not just a hundred. I'm talking a thousand. We had the German-American Society with Germans, Tyroleans, leather pants, everything, the whole thing. We had the Italian-American Society. In fact, both of them had houses, big houses, up on the slopes of Mount Tamalpais. They have merged, because of the war situation and only one club is left, the Alpine Club.

But hiking on Mount Tamalpais, Marin County, was very, very popular. I remember in '29 my godfather--Stanley--lived in Alameda--took me on vacation with his son, who was my age, and we went up to Russian River for a week. His name was Witkowski, Stanley Witkowski. He was deputy district attorney, and he served under Earl Warren, who was the district attorney of Alameda County. They were a wonderful branch of our family. Stanley's wife was just a beautiful woman, and he was a striking young man. He later Americanized his name and changed it to Whitney, Stanley Whitney. He ran for the district attorney's office and won, so when Warren went to the governorship, Whitney became the district attorney in Alameda.

And on that particular weekend, as we were driving down back from Russian River in 1929, all you could see was smoke. The sky was just filled with smoke. Tamalpais Mountain was on fire. Everything just burned. Just destroyed the train that used to go up to the top of Mount Tamalpais, the curviest train in the world and so on. And just miles and miles of Tamalpais was burned.

So we came down. Of course, we were worried at that point, so instead of going down and taking the ferry to San Francisco and another ferry to Alameda, which is the normal thing to do, why, I remember Stan saying, "Hey, we're going to go the other way." So we went from Petaluma over to Vallejo and then took the bridge from Vallejo and came down that way. And all the time we would watch the fire. It was a really monumental--this was not a fire that burned a lot of houses because there were not that many houses, but that whole side of Mount Tamalpais that faces San Francisco was reduced to scrub. Very, very sad.

So hiking and Boy Scouting became a dominant facet of my life in those days, simply because there was nothing else to do, and I tended to be more of a reader and student. I was very good at basketball, fairly good at baseball. Those activities require you to make up a team, and downtown schools were not noted for a lot of playgrounds. You did not have a lot of people.

I mentioned earlier that there were gangs in San Francisco. There always were. There was a big sports tradition in San Francisco. When I was living in the Mission and then later in downtown San Francisco, we had three professional baseball teams in San Francisco. We didn't just have the Seals. They were the best. They were the Triple A league. But we had the Missions down in the Mission District. And then we had another team that played out there near Lone Mountain because there was a big field right near the Benedettis, and that was used not only for baseball but later for football.

Lone Mountain was sticking up there with a mile around it which were empty lots and cemeteries. Then they moved the cemeteries. But there were all kinds of sports activities. Basketball was just beginning, really. I used to go to the Hayes Valley Center, which was an old church which had been converted into a community center. Well, the Hayes Valley gang--that was their hangout. They dominated. The Hayes Valley gang is still in existence today.

Not too many years ago, there was an article in the newspaper in which they had a rumble with one of the other gangs down in the Civic Center. One dead and three in the hospital. This was a turf war. Just like, you know, the *West Side Story*, [chuckles]. This was the way it was. There were quite a few gangs in the Mission District.

Swent: Were there drugs?

Maslach: All these were kid gangs, young, youth gangs. And the gangs were essentially--

Swent: Male dominance?

Maslach: Oh, yes! Macho, very macho. Very male dominant. "This is our turf, and you stay out of here." You have to remember it was a poor time, and if you had a basketball court, you didn't want anybody else in, from some other outside place, coming in and playing basketball.

Swent: What sort of weapons did they use?

Maslach: Knives, guns. When I was in junior high school, a young man, obviously older than the rest of us in junior high school, by the nickname of Spannie--he was a Spanish--Mexican-American or Latino--we couldn't tell. He did not look Mexican-American. He looked much more Spanish-Latino. He was an outstanding soccer player, you know, from a soccer background. And also, in this school was a big popular person who was also a very good soccer player but defensive. His name was Nelson. A big, husky Norwegian.

Well, they obviously had a run-in on the field, but they were also members of different gangs. Spannie, who was quite small, ended up knifing Nelson and putting him in the hospital. Nelson was a big man, but he couldn't deal with that knife. And that was in junior high school. Those were junior high kids doing this.

Swent: It isn't anything new, then.

Maslach: Oh, nothing new. But, you see, then it was much more personal. I mean, there were fights in the alley half a block away from the junior high school. I was involved in one fight, but I was smart enough to know things about fighting, and so I got in my first punch and I put that guy on the ground. And that was it. No one ever challenged me again in my life. My brother's reputation ahead of me was that he was the big sports guy and very strong, and no one challenged him. He was good. So I came in on his coat tails in certain respects. This happened everywhere. When I went to high school and junior high, everybody would say, "Oh, I remember your sister." "I remember your brother." And I would always have to say, "Yes, yes." [laughs]

Swent: Now this is John Swett Junior High.

Maslach: John Swett Junior High. That is on McAllister Street between Franklin and Gough.

##

Maslach: I'm in the junior high school by this time, becoming a bit more adult. You're past the twelve-year-old period, you know. You're beginning to be in gangs, and you're in the Boy Scouts. Things are moving into a whole new kind of development.

Swent: Which high school did you go to?

Maslach: Galileo.

Swent: Was this a four-year high school?

Maslach: No. Three years high school.

Swent: Three years junior high?

Maslach: Three-year junior high: seventh, eighth, ninth, then tenth, eleventh, twelfth. In those days in San Francisco there were very few high schools because, as I said, the city had not built up. Lowell High School was the academic high school--still is--near the Golden Gate Park Panhandle, Masonic Avenue.

The next high school was Polytechnic, which was over in the Sunset, near where Kezar Stadium was, just at the beginning of the park, in the Sunset area. And, by its name, it was shops. This was essentially a shop high school.

The third high school was Commerce. It was downtown, right near the Civic Center, and, as its name implies, this was for people who were going into commercial activities: offices and so on. This was the closest high school to where we lived.

The fourth high school was Galileo. It was the science high school. It, of course, is up there in North Beach, on Van Ness Avenue and Bay Street. That's where I went eventually.

But in the junior high schools, there were more of them, and John Swett was the closest one. As I said, about a six blocks' walk from our house, at Larkin and Eddy. I'm trying to give you the knowledge of how you grow up in this urban environment, which was a small urban environment but very intense. I mean, I don't want to harp on problems of prostitution, but it was part of our life right there. And drinking. Downtown. The various bars and so on. But this was just very common. Of course, I had seen some of this since the Polish House bar and so on, things of that nature.

Getting back to the Polish House, for example, dropping back one notch, but I would go with my father and mother and I would run the coatcheck stand. You know, a nickel to check your coat.

I got to keep that amount of money, so this, as I said, became my financial era [chuckles].

Swent: Did your parents have liquor in their home?

Maslach: Very little. My father and mother were not drinkers. We drank wine with meals back with the Benedettis, and that was a bit of a thing that hung on. For example, just one block from our house on Larkin Street, our apartment house, was the headquarters of the Italian Swiss Colony Wine Company, which was big in those days. I would take a gallon jug, washed out, you know, down there, one block, and hand it to them. Put down twenty-five cents, and for twenty-five cents you got a gallon of wine. And it was not bad. It was not great. You know, in those days we would call things Dago red and stuff like that. But, you know, there was an awful lot of Zinfandel grapes and not Cabernet, but it was wine for the house, the table wine of Europe, and you had it with meals.

So way back, when I was very young, five years level, why, you would have the wine watered, but even I was always big for my age, so even when I was going out with Michel and his father to Des Alpes, why, they would put wine in front of me. So if I can bounce around this way, if you don't mind--

Swent: No, not at all.

Maslach: I was just going to point out that in the Des Alpes is a very interesting story that--it was run by a family, Basque family. The woman's name was Frankie; the man's name was Johnny.

Frankie and Johnny [chuckles] were lovers. They came from the Basque area in Europe, and they had children, and they had relatives, and they ran the place. Maiden aunts and then there was an uncle somewhere--Frankie was at the cash register, and Johnny was the maitre d'. Years later, when I was in college, I would go in there. I'd walk in. Frankie would just rush out and grab me and kiss me. Johnny would wave! I would always sit at a big table with Johnny. All the bachelors, essentially, had the big table. There were no chairs; there were benches. And family style. A big soup bowl and a big plate and a salad plate and a glass, with a napkin and silverware would be put in front of you, and the glass was used for water; it was used for wine; it was used for coffee. Standard French glass. Heavy. Heavy glass. So I can remember going there for many years. We were greeted by them. They knew me, and they of course knew Michel and his father.

There was a Basque place, restaurant, right across the street. No longer there because there's a Chinese housing development there. And there was a Basque place up at the corner at the hotel, the Hotel Uberoi. And then there was a Basque place which is behind Finocchio's, on Broadway, if you know where that is, Broadway near Kearny. So there's quite a few Basque restaurants in those days. But the Des Alpes is the one that's still around.

But the point I guess I'm making in all these different threads of my life coming together here--they sort of came together from twelve years on. Twelve years. I had good schooling in my grade school.

Swent: I was going to ask if you were a good student?

Maslach: I was always a good student. Studying came very easy for me. But the first two grades and the school out there on Golden Gate Avenue, and then in the John Adams School, third through the sixth grade. No problems. I was always one of the better scholars in the class. My problem always was that I was--not hyperactive but I would get bored, so I would talk. The teacher would call you a chatterbox. I never was sent to the principal's office or disciplined or anything like that.

The principal of Adams School was a big woman by the name of Vogelsang, "birdsong," German.

Swent: Miss, no doubt.

Maslach: Miss. With skirts right to the floor, you know. She was a real tough disciplinarian. She ran that place with an iron German hand. But I remember, a third grade teacher, I got along very well. Fourth grade and so on. I had no problems. In the fifth and sixth grade, just as, as I'm saying, I'm getting to the year twelve, you know, my reading was a dominant, dominant thing. I don't know why. They had in a classroom a bookcase: about three shelves, about five feet long, so about fifteen lineal feet of books. Well, a whole bunch of them were beneath me. I had read them and so on, and so I remember in the sixth grade I had read every book that was--you know. And there was one book left, a big one. I looked at it and picked it up. *Les Misérables*. Jean Valjean. I read that in the sixth grade, eleven years old!

Swent: That's amazing.

Maslach: So I was reading far beyond my years. And the main library, in the eleventh grade, I was upstairs in the catalogs and taking out books on exploration, and I was reading geography heavy. I was

reading history heavy, very heavy. I later got into biographies, but that was more like fourteen or so. And the librarian would always feed me stuff, you know? I remember many a times I'd walk in and leave the four books to be checked in, and "Oh, but George!"--and then she would reach back and there was a new book that had come in and hadn't even been out yet, but they saved it for me. And you would read this. So I was getting a lot of instruction from librarians in the San Francisco library.

I remember upstairs in the card catalog area there was one especially that I would go to, and I would wait to see when she was at the long barrier between us and the stacks--we're now talking about a barrier that was about seventy feet long, and they would come in with the books. You would give them your card, and you would make out the card for the book you want. But this one woman, she really knew what I liked, so I would put a card down on and--let's say, I'd be reading about the original Hillary and others, the original climbers on Mount Everest. Well, she would go there and if that book was not there, or if there was another book that caught her eye, she would bring it along as well. "Try this." So she was feeding me stuff. I learned more about Everest and India, Tibet [laughs]. It was a great life.

The point was you had your house, which was not a house; it was an apartment. My sister, my brother and I slept in the same room until we were in high school. The living room was in part the office for the apartment house. We had the kitchen and dining area. That's where the table--good lighting--you would sit and read. Sometimes in the front room, too, but--you did not have a rural life. You had a very urban apartment life.

Swent: Cosmopolitan.

Maslach: Oh, yes. And I would sub for guys selling newspapers on the corners. I would run errands for the pharmacist who was on the corner. I would deliver drugs to apartment houses all around. And there was a smoke shop on the other corner there at Eddy and Larkin, and there was the most beautiful older woman, who was the cashier and ran the thing. They had a gaming operation in the back room, which was illegal. They had card games going in the back room. I remember the first time she asked me if I knew the French laundry about two and a half blocks down, and I said, "Yes." She said she had a blouse that she wanted to get, so she gave me money to go down and pick up the blouse and come back.

Swent: What sort of people rented your apartments, in your building?

Maslach: The rents in those early days were around twenty to twenty-five dollars.

Swent: A month.

Maslach: A month. Almost all of them, a large percentage, let's say--a large percentage of them were commercial and/or government types. Women that is, office personnel, working, of the State Department building. It was on McAllister Street and the Civic Center. Or at City Hall. So we had quite a number there. Or the shop keepers. I remember one guy that owned a liquor store lived there. He was just down the street. They worked close, within walking distance. No one had an automobile, nobody. So it was all people nearby. We had one woman who was the principal of a special school for retarded and/or disabled children.

Swent: They were adults, not many children.

Maslach: There were no children. The apartments were one bedrooms, so that did not lend itself to children. We were the only children. So we were in an adult environment immediately.

I just did all kinds of--you mentioned chores around the house. What happened was that during that period--twelve and older--or even ten and older--I would help my father. Well, very quickly I learned how to replace a light switch or do electrical work. I did replace washers--

Swent: No wonder your marriage has lasted so long! [laughs]

Maslach: I do everything in a house, all painting, all floors, all windows, all everything else. You name it. So I got to do these things, and after a while, of course, my mother would say, "Look, we've got an apartment up here that's burned out the switch." So I would get the tools and go up with her.

We had nurses there. I remember there were two nurses at one time. I remember their white uniforms. There were hospitals nearby, downtown, St. Francis up on the hill. So there was a lot of that. Schoolteachers, that type.

It was transient. Some people stayed a long, long time. But I would say half of the apartments, long time; other half of the apartments, short time. I'm talking six months, a year, short time.

The biggest thing besides that rapid growth of Boy Scout activities was when I went to junior high school, I used to always take a shop class. I liked shop work. You were required



to take shop in those days. So the first year, first semester, there was a wood shop, and the second semester it was a metal shop, a sheet metal shop, and then after that you could choose, but there was machine shop. Well, I did well in the wood shop; I did well in the sheet metal shop. I liked it and did all the things. I found, years later, that my son was making the same things in sheet metal shop that I did. Oh, sugar scoops and--

[tape interruption]

Maslach: But I met schoolteachers there who accepted me in a more--not a peer role, but as a colleague. For example, my seventh grade home school teacher was a man (which was rare in those days), but he taught social sciences and he had worked in the police department for a long time. There was a woman in seventh or eighth grade who was--

Swent: Do you remember their names?

Maslach: No. The man, incidentally, remembered me. He--years later, when he was working down at central administration, and when I became dean of engineering it was in the newspaper, and he called me up.

Swent: How nice.

Maslach: That's a long time later!

Swent: Yes.

Maslach: And so--but there was a woman there. She was really a beautiful, tall woman. Very distinctively modern. Everybody knew she was married, and therefore she was illegal. A woman could not be a schoolteacher if she were married. That was two jobs in the same family. No way. But she was.

And then the man that I met was the machine shop teacher, Bill Andrews, who became in essence a father surrogate, one of many. He was building a boat, a small power boat, and I helped him with that power boat, and then for years later, why, he and I just fished and boated, you know, went up the Delta and the river. His wife was a beautiful woman. Looked very much like Myrna Loy. He was disabled. He had a leg with a big brace, paralyzed as a youth. He was a real character. He had been a professional boxer and fireman. You know, all these things. We were lifelong friends. I stayed with him, visited him even when I came back and I was dean.

Swent: Was your Scoutmaster a person you were close to?

Maslach: No. We went through a whole bunch of different Scoutmasters.

Swent: Where did you meet?

Maslach: In the Adams School, at the beginning.

Swent: In the school.

Maslach: Yes. Later, down at Junior High School. But the father surrogate that I met and developed there was a man by the name of Vic Sharp, who was the associate head of scouting in San Francisco. For years he and I worked together in developing Scout camps, repairing them, and developing new ones in the Sierras. He introduced me to the Sierras. I think it hit me at a kind of a break point because age twelve on gets into heavy scouting and gets into yachting a lot, boating. And it's kind of a turning point.

### Frances Eberhart

[Interview 2: August 27, 1998] ##

Swent: At our last meeting, you spoke of Frances Eberhart's death, and we didn't follow up and say what the significance of that was. I think we had better put that in here.

Maslach: Frances Eberhart was a dominant figure in the College of Engineering for many, many years. When I first met her, I was a student and I was a research assistant working for Mike [Morrough] O'Brien, who was not yet dean, and Richard Folsom, Professor in Mechanical Engineering. When I received my first paycheck from the University in 1941, it was given to me by Frances Eberhart. With her in the Mechanical Engineering office was Vi Lane, who later moved over into the undergraduate student office and became another very dominant figure in the College of Engineering over the years.

During the war, a lot of people on the faculty and also among the staff moved up the hill. Worked at the Radiation Laboratory because they were in need of people. When I graduated, the population of students had just diminished enormously, so there was no work on campus. Many staff--Frances Eberhart, I know, went to work at the Radiation Laboratory. Her name at that time, her first marriage, was Frances Woertendyke. She was a tall woman and a dominant person. She had an interesting sense of humor. She had a great laugh, which was

kind of a male laugh, and very loud, and she would just laugh and everybody else, of course, would laugh with her. She became the administrative assistant for Mike O'Brien during the war period and after the war--after the war ended, I should say. So she was with the College of Engineering in an administrative position all the way back to the big, big change which occurred immediately after the war, when the College of Engineering went from four hundred students the last year of the war to four thousand students the next year. They were running classes Saturdays, Sundays--Sunday afternoon, that is. They were running laboratories evenings, and they were just struggling to get people to come and teach. So that was a very hectic time.

She continued as the administrative assistant for John Whinnery and then, for the first few months, with me. My style of administration, which I'll get into at the proper time, I discussed with her. She had another job that she had her eyes on. It was a job at systemwide. It was engineering liaison committee work and all other systemwide engineering work. She was just perfect for the job. So after finding a new assistant for me, she went to systemwide.

Swent: We had better explain what "systemwide" means.

Maslach: Systemwide is our shorthand for the president's office, which has administrative overview of the entire University of California system, which consists of nine campuses, of which Berkeley is one. Los Angeles another, and so on.

Swent: And the offices are also here in Berkeley.

Maslach: It's in Oakland.

Swent: Well, yes, Oakland now.

Maslach: We have a brand new building in downtown Oakland, which I have yet to visit. I have known many of the presidents, and this one, Atkinson, was especially well known to me because when he was at Stanford University he and our daughter Christina, who is now a professor here at Berkeley, knew each other. She took courses from him, and he was considering being her thesis advisor. Now, you know, many years later, he goes around bragging about her, about he was her advisor. Well, he really was not! But that's the way he remembers her. [chuckles] So, with my joking references of the three stages of life, first you're known as the son or daughter of parents; then you're known on your own; and then at the end you're known as the father or mother of--artist son, or professor daughter.

Swent: But that's very gratifying. Well, that was one thing that I wanted to follow up.

Maslach: We'll be getting back to Frances Eberhart time and again, as we get along.

Swent: That name crops up in everybody's recollections.

Maslach: Her second marriage was to Howard Eberhart, who was a civil engineering professor, and he retired, and a few years later she retired. They moved down to Santa Barbara, where he continued to teach for many years. I was surprised how long he was teaching.

Swent: When we stopped last time you had been talking about John Swett Junior High and you had spoken some about high school, but I think that there was more that you wanted to say.

Maslach: Yes, we were wandering around.

#### Clothes for Work and School

Swent: That's the way conversations go. I don't believe we talked at all about clothes.

Maslach: About what?

Swent: Clothes, what you wore to school.

Maslach: [laughs]

Swent: And what your father wore to work, and so on. You mentioned that your mother made a lot of your clothes.

Maslach: My mother made a lot of our clothes when we were very young. By that, I mean in grade school. But come junior high and high school, we purchased clothes. My family always dressed well. My mother, with her background making clothes, she made sure that we looked up-to-date. She refused to let us wear jeans, for example, to school. We wore corduroys, which was a pretty popular material in those days. But as we got into high school and so on, it was slacks and sweaters.

Swent: What kind of shoes did you wear?

Maslach: I always had a memory of going to get shoes because my shoe size now is ten and a half, but it's wide, so when I went to a shoe

store, in those days they had those fluoroscopes, in which you could look at your feet within the shoe. We'd go in there and finally find a pair of shoes that fit right, and I remember looking in the fluoroscope and seeing my bones in my toes and so on [chuckles]. It's a relative of the concept of X-rays. Again, my mother did not care for us ever to wear tennis shoes, "tennies," which were very popular in those days, mainly because tennies just smelled up your socks something horrible.

We were well groomed. I mean, my mother made sure that we looked well. She was in the house, apartment house all that time, my age nine on, 1929 on. She was always well dressed--I never saw her in anything but dresses. She was--I remember the quiet personality, excellent as a manager of the apartment house. We did a lot of work together as I grew older. It was an interesting life.

What I was trying to do at the end of the last session was to kind of move from one era to another era. Up until age nine, we were living down there in the Mission and then we were living out in the McAllister Street area, near Lone Mountain. Those were sort of the boondocks of San Francisco. As I said, there were acres of land just outside of our house in the Mission District, and they had the Barnum and Bailey Circus, whereas the other way we were up there next to cemeteries, which were then moved while we were sort of in existence there, to make more land available for housing. So we were really on the edge of then what was San Francisco downtown area.

The new era really began when I was nine. Never really flourished until I became twelve, more or less, because you had to grow larger and [chuckles] in grammar school, you did not have the opportunities that you have when you move on to junior high and high school. The whole social fabric changed. The thing I'm trying to emphasize is how living in downtown San Francisco, that was a very, very exciting thing. I just was able to take advantage of it without knowing what I was doing. I mean, this was certainly nothing that--

Swent: You mentioned the library, what an influence that was.

Maslach: Yes, I started going to the library right away when I was nine. We had empty lots nearby, and we played ball in various places. And the playground, the Swett playground, was about four blocks away. But we didn't go much there when we were in grammar school; we tended to hang out on our side of Van Ness Avenue, rather than go to the other side.

I can remember, for example, on Van Ness Avenue, where the opera house and veterans memorial building is--Van Ness Avenue between McAllister and Hayes--and that was a big fenced-off area there. We would sneak around the fence in some way or another, and the whole area was just sand dunes. But what was remarkable was there was an artesian well system in downtown San Francisco, with water coming right out of the ground, in large amounts. I'm talking a pipe the equivalent, say, of six-inch diameter flowing quite full.

Swent: These were wells that were tapped?

Maslach: They had been originally tapped when the city was young, but when the water system which was piped throughout the city came into being, these artesian wells were not used. In fact, on the other side of the Civic Center, down next to the library, was another big area near the building which is now the federal building. That was all the same thing: sand dunes and water. So you think about--

Swent: It's amazing.

Maslach: --what I'm saying, you know. Here, 1930--let's say we're 1990--sixty years ago, right in the center of the city, next to the City Hall, were blocks and blocks of sand dunes with water, and we used to go down there and play. We would of course get chased out by somebody, but it was quite a time. In those days, if you went out into the Sunset District, there was no housing beyond about, oh, 15th Avenue, 19th Avenue. All the way from 19th to 48th was just sand dunes, and I mean miles of sand dunes. To a much lesser extent on Richmond, north side of San Francisco's Golden Gate Park. But it was country in that regard.

### The Library and Reading

Maslach: The use of the library I think was my first kind of big break into the modern something else. I truly enjoyed that library, and I made use of it. I still have great memories of the grand staircase that goes up to the second floor. The children's library was on the first floor, down on the south side. I always recall vividly the statue and the plaque there to Carnegie, Andrew Carnegie, who gave a large amount of money for the library. That was part of his giving money to the people.

I developed a technique of reading which was essentially, I guess, what they call speed reading; I read so much. For

example, I just finished a novel in two or three days. I read the last novel written by Dorothy Sayers, the great mystery writer in England. She finished it up to about the three-quarter point, and then got busy doing other things that she liked better. She left instructions on how to finish it, in outlining and everything. The foundation found someone who wrote mysteries in her style and she, this other woman, finished it up. It was kind of interesting to look and hear, listen to the same Dorothy Sayers that--[chuckles]

Swent: What's the name of this last book? I can't remember. I know I read a review of it.

Maslach: *Thrones and Foundations*. Right now, the book I'm reading is one by Saylor, Steven Saylor, a Berkeley resident, who writes novels which are based upon ancient Rome. He has a very, very good knowledge of the history of the time, and he pulls in history, so you have Cicero and Mark Anthony and others involved in a novel. I find I'm reading much more fiction than I used to. But in the early years, when I was young, I read very little fiction. I was enormously dedicated to history, biographies, things of that nature.

Swent: Adventure stories perhaps?

Maslach: No.

Swent: Adventure travel kind of thing?

Maslach: Yes. For example, I remember reading everything about Leigh and Mallory on Mount Everest. I've got a fascination with mountains, and Mount Everest especially. So I read in that area very, very heavily. And I did a little more reading maybe in sea exploration, geography, because I've always been involved with the bay and the ocean and so on.

### The Great Depression

Swent: I'm thinking, of course, of trends that continued in your life, and obviously reading has continued to be important to you.

Maslach: One of the things I want to emphasize is that while it is quite true that I grew up immediately following the great crash and therefore the Great Depression, which in essence did not finish until 1939, ten years--nine years old to nineteen years old--that's a very, very important period in your life.

Swent: It is.

Maslach: And I could see--because I saw it in other young people--how you could wallow in your self-pity and so on, or you could just strike out and do things on your own. There were no gyms; there were no recreation centers. They had one man overseeing the playground area. You know, he was just overwhelmed--you would pick up basketball games and so on.

So the second phase I was referring to in that period was to get involved in the Boy Scouts. My brother, four years ahead of me, and myself. So we formed a good team, and we went on--both went to the highest levels: Eagle Scout with many merit badges. And then later, when they started the Sea Scouts ship, the quartermaster scout was the highest you could get in, the Sea Scouts. But we were just heavily involved in the activities. Myself especially. My brother was more active in sports activities, being on a championship basketball team in Commerce High. He was not on the varsity; he was on the 130s. That's a junior varsity. Younger, smaller people. One thirty is the number of points that had to be less than. That was the limit. It involved height, age, and weight; and it was the league for smaller players. But he was on the All-State soccer team, varsity, and a very young, active athlete. Always was a good student, too, as well.

Swent: You had mentioned your scouting and Vic Sharp.

### The Blackhawk and Jazz

Maslach: Yes, that comes out a little later. I'll get into that in just a little bit, as I move along. But there was a third activity which I'm nostalgically very proud of, that I got involved in, again on my own initiative. I used to walk past Turk Street, and I would walk past a place on the corner of Hyde and Turk. It was called the Blackhawk. You know, when you're ten, twelve years old, you don't know about nightclubs or jazz joints.

Swent: Your parents weren't frequenting them.

Maslach: No, no. We were still in the period of my playing the violin doing classical music, which I enjoyed. Oh, I was about twelve, and, as I say, I was tall for my age, and I just kind of was looking around. Obviously, it was a drinking establishment of some sort. You could smell beer, very prominently in there. It had to be after twelve because Prohibition ended when Roosevelt



came in. So I remember some man who probably was just a janitor there. Asked me what I was doing and so on. I said, "I'm just checking out what this place is. I just live around the corner." It's only two blocks, less than two blocks from my house.

So he flipped on a light. They had one big light, you know, on top of the stage. There was a place for a band or a group to be playing, and there was lots of chairs and tables. Now, many people will tell you that they have been to the Blackhawk, but I have found over the years that most of them never were because I would ask them a very simple question. I would say, "Where did you sit when you were in the Blackhawk?" And they would claim they were under age. Oh, they would say, "I was at some table or something."

And I knew right then that they had never been inside of the Blackhawk because prominent on one side, in the rear, away from the door, was an area which was quite strange. It's a small area, the size of this room, a little smaller than that, actually. Narrower. But what made it strange was that on three sides there was chicken wire. You know what chicken wire is?

Swent: Yes.

Maslach: Chicken wire, octagonal, about the size of a golf ball, openings. And this area was for under-age people. And it was called by everybody "the Chicken Coop." So if a guy or woman says to you, "Oh, I know the Blackhawk. I've been going since I was a kid and sitting in the Chicken Coop," you knew that they were there. They knew the name, they knew the chicken wire, they knew everything. You could get soft drinks there, but you could not get, of course, any beer or liquor or anything like that.

Swent: And it was actually separated by this chicken wire.

Maslach: Just a little section. Just think of that. Now, this was in the thirties. What forward-thinking people they were to have a place for youngsters, young people, just to hear jazz. The Blackhawk in the thirties was the premier jazz joint on the Pacific Coast. Everybody came there. It wasn't really that large, but it had good acoustics. It's an empty lot now. It was beautiful. If you ever have a chance to get a copy of Ralph Gleason's book on San Francisco jazz in the thirties and forties--he was a great jazz critic for the Chronicle. His statements were so focused--his articles--his statements on jazz at that time are just fabulous.

So I used to go there from about age twelve on, all the time. Of course, everybody would recognize me after a while as

someone in the neighborhood, so I soon could go and sit down outside of the coop. The drinks were, of course, Coke, which was in the little bottle. But the other drinks--if you wanted something quite sweet, they had something called Delaware Punch, which was really sickeningly sweet. They had the Nehi beverages, --an orange crush and things like that. You could get ginger ale and so on, but we did not have all of the drinks that are now available. You know, all of the soft drinks available today. So this was my beginnings into jazz. I heard many, many of the top people of jazz.

Swent: Were there blacks as well as whites?

Maslach: Yes. In fact, I wasn't aware of the colored problem, especially jazz, when I was young, but of course you rapidly find this out because after a while, more than half the performers are black. And you look around your population and there's not a single black in San Francisco downtown. I never saw one. Blacks did not become part of the Bay Area until World War II, and Henry Kaiser brought populations from back East, to work in the shipyards. And I find that an interesting commentary because my father said that he came from Chicago to San Francisco on the train, free transportation, because we were going to San Francisco after the earthquake and fire, so it was exactly the same procedure that Kaiser used many, many years later. It's the way the West was won.

Swent: That's right.

Maslach: Those were kind of the three movements: the library, Boy Scouts, and jazz.

### The Sea Scouts

Swent: Mechanics didn't come in particularly?

Maslach: Well, not at twelve. And the mechanical concepts and what I was interested in doing did not really start booming until, oh, the age fifteen, sixteen. I'm in high school at that point, and we have kind of finished the Boy Scout period. At that point, when I studied naval architecture by using library books, we received a life boat from one of the shipping companies, which was a tubby kind of a boat. It was ours to do what we wanted--

Swent: This is the Sea Scouts.

Maslach: Sea Scouts. We fixed it up, and I designed the sails, the keel, the rudder, which are the key items, and we built a ketch-rig sailboat which was fast. It became the model for conversion of life boats thereafter in the Sea Scouts. We never lost a race. You know, this is sort of moving into the Sea Scout area, before I can be talking about the mountains and the Boy Scout area. But there is one very interesting point because I think it kind of illustrates the way I acted. Here we got the boat. I was sixteen years old. I had been reading all about naval architecture and design of rigs and so on, keels if it's a balance problem. And I was told that a senior man, about fifty, sixty years old, would design a rig for us. So I went to him and saw what he designed. Well, what he designed was essentially a kind of rig that was an ancient rig, a dipping lug rig. And it was something that comes from the Mediterranean all the way back to year 500 B.C. or so [chuckles]. The Arabs still use the lug rig for their dhows in the Red Sea. But I looked at it, and I just went back to my books and figured out that the boat would never move. There was very little sail area. So I designed something, and I ended up with twice the sail area, and masts that were twice as high, and with a Bermuda rig, which came into being around 1915. And so, as I said, it was successful. Our Lions Club sponsors bought the wood for us for the masts. We made the masts. And made the booms. We rigged everything. As I said, it was an exciting time, this whole thing.

Swent: You were doing all this, of course, in addition to school.

Maslach: Oh, yes. I was down at the yacht harbor a lot. But before I got to high school, there was a family that played a very important role in my life.

Swent: You have some lovely pictures here.

Maslach: Well, these, I've chosen them just to illustrate things.

### Bill and Helen Andrews ##

Swent: What do you have?

Maslach: Well, I wanted to talk about people who had major influence on me during this period. At age twelve I had moved over to the junior high school, John Swett Junior High School. You had to take shop classes in seventh and eighth grade. First I took a wood class, then a sheet metal class, then I took a machine shop class. The

man who was the teacher of that class, the man in the center there, Bill Andrews--

Swent: You had mentioned him.

Maslach: He was quite a character.

Swent: Oh, he looks very jovial.

Maslach: As a child he was stricken with infantile paralysis. He had a brace on one leg. But it didn't slow him down. He actually did all kinds of things, including professional boxing. He fought one of the light heavyweight championships in California, even though he was crippled.

Swent: And this [observing a photograph] is you. Who is the third person?

Maslach: That's his brother-in-law. We're holding up--I think there's about half a dozen salmon there.

Swent: Oh, at least.

Maslach: In those days we would go out, and I recall days where we caught nothing but thirty-six-pound salmon. Those are big. One day, oh, about five in the morning (it was still quite dark), he caught a fifty-one-pounder, which is a monster. Very difficult to get into the boat. This is a picture of a dozen salmon on the deck of the boat. We also caught striped bass. I remember one day catching three striped bass, all about twenty pounds each. In those days, sport fishing was a big thing. Not many people, but when you went out you could recognize all of the other people. And it was active. We had a nice cove for striped bass, and we went out the [Golden] Gate, of course, for salmon.

Swent: Did you need licenses?

Maslach: Oh, yes, you had to have a fishing license; but in those days there was no lid on salmon for sport fishermen. Today you're limited to two fish, and that's it, and today you get an awful lot of fish that are fifteen, eighteen pounds. Half the size that we were getting. So every once in a while I would come home with a couple or three big fish. Of course, my mother would scamper around, giving fish to everyone she knew, the neighbors and so on [chuckles]. And I think every once in a while she might have actually taken one of them up to the butcher and he would sell it.

One of the things that I learned many years later about my mother was that she was a gambler. You would never think it of her, because she was such a small and quiet person, but she would follow the papers and the horses. Our local butcher was the local bookie, and she would put down bets with him. So it was rather interesting at that time.

Here's a picture of Bill and his daughter, Nadine, and then his wife. Bill was a surrogate father to me in many ways, advising me on various things. His wife Helen was kind of a combination of surrogate mother and surrogate girl friend. She was a beautiful woman, and she looked very much like Myrna Loy. In fact, one time she and I went down for the New Year's celebrations around Fifth and Market, which is where they were held at that time, and then we walked up Powell Street and went into Lefty O'Doul's saloon, which at that time was on Powell between O'Farrell and Geary. We crowded in there and went to the bar. Of course, it was very crowded. But when she got close to the bar, they flipped. Myrna Loy! Someone gave her his seat, stool, at the bar, and I was behind her. So she would order drinks for herself and for me. I was probably seventeen--sixteen, seventeen.

My first drink with them as a family was up in Walnut Grove, up on the Delta above Rio Vista. She ordered for me a whiskey sour, which she thought would be what I would like, which as you may recall has a slight sweetness. I graduated to Tom Collins and gin and tonics, stuff like that. I was only sixteen at the time. But I was big.

This picture here, I was probably fourteen. They were very good to me because I would go out to their place for dinner every once in a while, and we would exchange Christmas gifts of a very simple nature, things like that. I used to take Helen ice skating. She loved to dance, and I was not a dancer, so we compromised on ice skating, which I could do very well because I had a brother-in-law who was an expert skater, Dick Guthrie.

Swent: Where did you ice skate?

Maslach: Well, in the old days, you took the J trolley in the Sunset District, all the way out to 48th Avenue, where it turns around and comes back. Right there at the Big Highway, right on the ocean. About a block and a half south of the J line, which was on Judah Street, was an ice rink. They just tore it down a few years ago. But it was there for many, many years. It was run by a family. I think they came from Australia. Sort of a British accent, but I think today I would call it much more an Australian accent.

It was not big enough for hockey, but close to it, so we did play a variety of games, like broomball, instead of hockey sticks and a ball rather than a puck. So I would take her out there, and we would couple skate. Not figure skating with being on your toes and so on, but dance couple skating. We just kept doing those kinds of things, and of course the two of them, Bill and Helen, thought I would for sure be the husband of their daughter, Nadine.

Swent: I was wondering where the daughter came into the picture. She's very pretty, too.

Maslach: Well, she was very pretty. She was several years younger. She went on and married very well, a prominent family in Marin County, and then there was a divorce after two children. Years later she met and married a man by the name of Mello. Georgia Pacific Lumber Company. Very well-to-do fellow. At one time was one of the highest paid executives in the United States in terms of dollars per year. There was another divorce, and she now lives in Pebble Beach, in the forest there. You know, nice house and so on. We never really hit it off. While she was younger than I, she just did not have the interests that I had, so things did not go that well.

Swent: This is one we might want to include in the volume.

Maslach: Yes [chuckles].

Swent: The approximate date would be what? Thirty-four?

Maslach: About '34.

Swent: Okay, let's remember that. Oh, this is--

Maslach: This is my sister's wedding party.

Swent: Oooh! This is your sister.

Maslach: I'm over here. Let's see if I can get through this. My sister, this is my brother, this is a Benedetti girl, this is my father.

Swent: Aha. And this is?

Maslach: I can't recall. Oh, yes, I can. That's cousin Peggy's daughter. I can't remember which daughter it was. Dick Guthrie, my sister's husband, who died about ten years ago, was very handsome, a Canadian, very good ability in anything he did. All kinds of jobs. He immediately became head of an office. Things of that nature. He had a very good personality. I'm sixteen.

Swent: And the tallest of the group.

Maslach: Right. You can see that--I was what they called "a long drink of water."

Swent: It must have affected you, to be so tall.

Maslach: I got along with it all right. It didn't bother me.

Swent: That's an advantage, isn't it?

Maslach: I think it is. Some people think it isn't.

Swent: Oh, no. I would think that that would make you feel important.

Maslach: This is a picture that my father-in-law took. It's just a boat called the "Ruby," "Ruby II." It was owned by a man, Stevens, Pop Stevens. Famous boat because in 1915 he built that boat, totally, with that rig, which was the modern rig, and he won the big Diamond Cup of the 1915 Exposition. He was a legendary racer on the Bay. His son, Babe Stevens, went on after that as well.

This is a picture I took. Really it's a composition. But that boat down there, lifeboat-looking. That's our boat. We had just put the masts and so on.

Swent: This is the one you have now?

Maslach: No, no, that's the "Sea Scout."

Swent: All right.

Maslach: If you look in the background--

Swent: And you built that.

Maslach: No, that--the hull was given to us.

Swent: I see.

Maslach: And then we just put in the masts and keel. Look back there. See, on an angle, the masts? That's a clipper ship.

Swent: For heaven's sake.

Maslach: In Richardson Bay--and this is Sausalito waterfront--see that island back there, with all those trees and one big house? That's Belvedere.

Swent: Oh, my heavens.

Maslach: There was only about half a dozen houses on Belvedere on that side. Today it's just covered.

Swent: Completely.

Maslach: And it's the hottest property around.

### Memories of Clipper Ships

Swent: And a clipper ship.

Maslach: Well, I have a painting done by one of Doris's uncles. It shows the Alaska Packer fleet. That would be in there. Shallow water, that is. That's why it's tilted over. But a painting of the ships, which you had--the clippers were now transformed into work ships, and they would go up to Alaska, fishing, and they would put away the fish--salmon, cod, and everything else--into salt, and this was the fishing fleet that left San Francisco at that time.

Well, as those ships deteriorated, they would leave them down there on the flats, so when I was sixteen years old, there were three or four of them out there. Later, I was building my own boat, and I was about nineteen or twenty years old. I remember borrowing a skiff or a little rowboat and going out and exploring around those ships. Those were fascinating times. I still have vivid memories of it. Because here's this ship. The deck is leaning, canted over, and you could tie the boat up and then climb on board. It was dangerous because those masts and booms could be falling on you. The whole thing was teetering. And I could see through the hatchways, and the light would be coming from the sky through that hatchway, down into the water down below. And as you would row around, you found that the wood hull had deteriorated so bad on one side that you could look inside. Apparently, just a ten-foot hole.

Here's this beautiful color of water within the hull. I checked it out. There was surprisingly warm water because the sun heated it all day long, and it never really moved out of there. It kind of just went up and down. So I used to--sometimes at lunchtime I would just borrow a skiff from the shipyard and just row out there and go swimming inside the hull of this clipper ship [chuckles].



Swent: What a wonderful memory.

Maslach: Yes. I still remember how beautiful it was. I mean, if I had a camera, it would have been a great subject for a photograph. But you see, there were so many opportunities in those days if you just had the initiative, which I never was shy of, to do things. For example, we couldn't afford much money to just stick the masts in the boat, so we rowed over to Sausalito. We went to a harbor there, which was run by a man by the name of Arquez.

This is a famous family in the history of California. Even early on, 1880, that is, there was an Arquez who was governor. This is when the old Spanish land-grant people still were a major part of California. So he was a descendant of that family. He owned a number of those arks that are along the Sausalito waterfront in the small harbor in there. We used to put our boat up for painting and so on there because it was low cost. And he was very friendly to people like Sea Scouts and so on.

Later, when I built a boat over there in another yard, I would stay at the Arquez yard because they had a classical wooden lumber schooner. These were ships that would go up and down the coast, mostly up, into the doghole harbors that are up and down the coast, and pick up loads of lumber, including deck loads, and bring them down to San Francisco. In the early days, they did not have any power--just sail. Later days, they would have small engines.

But I would sleep on this lumber schooner that was called the "Lassen". It had a forecastle, which was in perfect condition. A half a dozen people could sleep there, and that's where I would put my sleeping bag. In the wheelhouse there was a Norwegian man who ran the yard, so he and I, of course, over the years got to know each other quite well. I would go there, and I would listen to Arquez tell stories about the old days and so on, and of course the Norwegian was fixing up a boat and eventually went around the world. So to meet people like this when you were sixteen [chuckles], you know, it was really a very liberating period.

Swent: Sounds like it.

Maslach: You did not have to sit in downtown San Francisco.

Michel Lafaurie and Fishing Adventures

Swent: And your parents weren't concerned about your doing all this?

Maslach: Oh, my parents, you have to remember, had the first son, and I was the spare, and so I was just allowed to do whatever I wanted to do. I really had far more freedom than my brother, four years older, or my sister, six years older. So I romped everywhere. I got skates early on. These were the old steel skates, not the inline skates that you have today.

Swent: With a key?

Maslach: Yes, with a key, and you clamped them on your shoe and so on. I would skate from downtown San Francisco out to the beach, and I would skate up in the Marina and the harbor a lot. Michel Lafaurie, who I mentioned earlier, in our last session--he lived about three blocks away from me, and we would go fishing a lot, down at the municipal pier, Aquatic Park. That was a kind of rig, an arrangement that he had made up, and he would catch smelt during the smelt season. And then we bought all the equipment to make crab nets. It had a big ring and a small ring. Within the small ring was your bait, and between the small ring and the large ring was a mesh of line, which you wove. It looked something like chicken wire when you finished. And you dropped this down on the bay floor, and after a while you would hoist and if you had any crabs in there they would be trapped.

We were pretty smart. We knew that over there in Fisherman's Wharf they would have these big crab units, which were essentially a jailhouse for the crabs. They would dump the crabs in there when they came in from outside the gate, where there was much better crab findings. And they would put them in there and keep them alive.

Well, those things would deteriorate, you know, and there would be holes in there [chuckles], so you would put your crab nets down nearby, and so we were getting good crabs. Well, they didn't let you do that too much because they knew what was happening. They put out their own nets and retrieved those crabs that escaped from the jail.

But we would go to the next pier down, the ferry pier, next to Pier 39, Pier 41 today. And we would crab there, underneath the pier walk along the wooden structure underneath, and we not only caught crab but we would spear fish there.

Perch was the main thing you would spear. Perch anywhere from ten inches up to about sixteen, eighteen. It is a good-tasting fish, but tends to have a lot of bones. But we did these things. One of the ways we transported ourselves was I took my skates apart and I put them onto a rig which was a board, and a fixed axle on the back with two parts of the skates, and then forward a beam with a pivot, and then it would be two parts to the skates, and those would be my front wheels. And then you would have a line to that beam, one to the right side and one to the left side, so that you could change your direction. You would pull this little device. I used to have a little sheltered section in the front, like housing an engine would be, and in there I laid my fishing gear and stuff like that.

Swent: Sort of like a scooter?

Maslach: Like a scooter, yes. And we would drag these things up the hills and then we would just go down the other side. Well, you know, between downtown San Francisco and Fisherman's Wharf, those were pretty steep hills.

Swent: They are very steep. But no brakes on these things.

Maslach: The only brakes you had were your shoes, so that didn't last very long because I was wearing shoe leather out like mad. So we found wheels. We used to press the sides of our feet against the wheels for brakes. My mother never knew. She was always proud that I never had a bicycle during those days because she thought that was dangerous. [laughter] Little did they know how dangerous that was! So anyway, we had fun doing those kinds of things. Michel and I hit it off quite well because we had similar interests.

Swent: He was the one from Des Alpes?

Maslach: Yes, the Basque family. He went into ham radio. We used to make radios. I had my own crystal set in those days and would go to sleep with the earphones on [chuckles]. And then he got into ham radio and so on, and he had his own station. He got his license. So we would be up there on the roof of his house. He would get going and pick up someone in Australia or someone in South America. Ham operators cover the world. So it was very interesting doing that with him. He was much better electrically than I was, electronics-oriented than I was. He went to work for IBM. Went through junior college. He never finished a four-year college. But he was a sharp apple, and he moved up rapidly and did very well in that era.

Swent: Did you have jobs, paying jobs, earning money?

Maslach: Yes. I've got one more thing to say about he and I.

Swent: Oh, sorry.

### Memories of Hunter's Point and China Basin

Maslach: One of the best trips that we did very often was to skate from our house downtown, or take the trolley quite a ways. That's what we usually did. Out to Hunter's Point. Hunter's Point was a very interesting area in the days before the war. We had, of course, the drydock there. But that whole area between Hunter's Point and downtown San Francisco was a graveyard of shipping. You would have old clipper ships, of course. You had all kinds of barges and other kinds of commercial craft, and they were just beached up on the mudflats and allowed to just disintegrate. I always recall we would get down there fairly close to the shipyard area, which was off by itself. Fields between Third Street, which was the main drag out of San Francisco, down the Peninsula, and Hunter's Point.

And you, of course, went through some old areas there of housing. Bayview, for example, had beautiful little shopping areas and so on, but it also had this opera house I always recall. The opera house at Bayview is still there. Historic building. But we would get down to the water, and we would go to the Chinese camps. There were half a dozen of them just along these old ships that were disintegrating. Chinese families would be living there, or they would be living up in little houses up in the fields.

What we would do is buy shrimp, cooked shrimp, in a bag the size you get peanuts in at a baseball game. It would cost about five cents, ten cents at the most, later on. And you would just walk up in the fields and just sit up there, and you would have nothing but fields and over here was the drydock, which was a wonderful looking piece of something. You know, we didn't understand exactly everything about it. But out in front of you, looking up at San Francisco, you could just see miles of old ships disintegrating on the mudflats. And the dominant ship that was there was a ferryboat. It was the Bay City. That was the name of it. You would see it. It was canted over so that the side of it was facing you. On the side of it was, of course, the big name, Bay City. It was an old walking beam ferry that was just dumped there, just wasting away.

So it was a very interesting area. We had shipyards and what have you. You had the Chinese camps, the Chinese shrimp fishing on the bay. There was still oyster fishing then, too, in South Bay. Now pollution. I haven't heard of oysters in the bay in forty years. But the Chinese camps there and later, of course, in Marin County, they were very active. It was interesting.

Swent: Amazing how it's changed.

Maslach: And, you know, it wasn't the modern Chinese that were there. These were Chinese men with pigtails, long pigtails, and costumes which were quite Oriental. It was an exotic kind of a place.

Swent: And they lived by the shrimping they did?

Maslach: Oh, yes. They were living by shrimping up at China Camp up there, Marin County, up to just a few years ago.

Swent: I remember reading of it.

Maslach: I remember five years ago or so, maybe ten years, going up there and getting bay shrimp cocktails, right there at China Camp. It was quite up-to-the-minute. But I haven't heard any more about shrimping up there.

Swent: No. It sounds like a wonderful childhood.

##

Maslach: What I'm trying to picture to you is the fact that it was just an exciting life. I mentioned last time that I was involved with the Boy Scouts, but I never went to a summer camp with the Boy Scouts, simply because we did not have that much money. You have to remember that I had a six-year-old sister and a four-year-old brother. Both of them went to college. As our father said repeatedly, since I was young enough to understand, "You are going to go to college." She went to the University of California School of Art down at North Beach, San Francisco. It actually was a famous art school with teachers that are today renowned for their art work. It later became the San Francisco Art Institute, which it is today. It's a beautiful square block of academia. [The name of the school in the 1930s was California School of Fine Arts. It was an affiliate of the University of California. --ed.]

And then my brother went on to UC Berkeley.

Swent: What are their names?

Maslach: My brother's name is Michael--was Michael. He died several years ago. And my sister is named Sophie. In Polish, Mihach and Zosia. In Polish, the name George is pronounced YAY-jick.

Swent: Oh, I won't try that.

### Vic Sharp and Al Christopherson, Scout Leaders

Maslach: [laughs] But one of the best things that we did in the Boy Scouts before we got too involved in the Sea Scouts--we kind of overlapped that--was to work with Vic Sharp and Al Christopherson, who were the regional Scout leaders for San Francisco. The chief of the Scouts was Raymond O. Hansen, a legendary figure in San Francisco. Vic Sharp was the associate, under Raymond Hansen, and Al Christopherson was a staff member.

Vic Sharp was an extraordinarily able fellow. One time he was driving instructor for Greyhound Bus Lines, so he taught people how to drive. But he went into scouting and was very good at it. He had a very good mind for the youth, also. He was a very good administrator. He knew how to use people. It was always a shared experience. He did not just turn things over to you. He knew how to delegate--but he did quiet supervision. He had a wonderful, dry sense of humor.

I don't know just how we got together, but starting when I was about fifteen, we went into a program of rebuilding what was then called Camp Roy-A-Neh. That was in Cazadero.

It was some Indian statement which I cannot tell you what it means today. It is now called Camp C.C. Moore. Obviously, this was named after the Moore family, Moore Drydock, somewhere down there in Oakland. What happened up there at camp was that during a winter windstorm--rainstorm--a grove of redwood trees fell down on the main building, which housed the kitchens and the dining area for five hundred scouts. It really demolished the deck in front and part of the dining area. It did not touch the kitchen area.

I would walk down to the Scout headquarters, which was on O'Farrell and Market. There would be Al and Vic in his car. They had all kinds of food. Another man came with me. He was a Mexican-American. And all I can remember of that is his first name, but I have now forgotten his last name. We didn't see much of him. He went up a fair number of times. He was excellent in

cutting and chopping and sawing wood, especially with the big saws that we had.

### Rebuilding Camp Roy-a-Neh

Maslach: We would leave about four or four-thirty, Friday, and go up to the camp. We would stay at the chief's house in the camp--sleeping bags. Vic was an excellent chef. He would cook, and we would have our meals, and we'd also look over what was needed to be done. And then we started doing these things. We, of course, cut trees and moved them off the building. I'm talking up to six-foot-diameter redwood trees.

But I also got involved in doing all kinds of other things, which I had been taught to do by my father. Starting at about age twelve, my father, who had one job with the Leighton Industries in all these restaurants, would take me along. And the reason he took me along originally, of course, was if he ever needed some tools, I could run back to the house and pick them up and bring them to him. But you do, you know, absorb knowledge, and so this osmotic process, watching my father fix leaky plumbing or bad wiring or something--so after a while you learned how to wire fuse boxes. (We didn't have circuit breakers in those days.) We also learned how to do plumbing, and learned a certain level of woodworking. Of course, twelve on out, starting wood working classes in junior high school. And sheet metal classes. It all kind of just melded together.

So I would go around to these dairy lunches, they called them in those days--small cafeterias. Of course, the manager always loved us. We fixed something, you know. And some of these things were really messy, like sewers, a sewer clog. It was just a hell of a job! Usually in the middle of the night. So I would be out there with my father, and then we would go back home. But in the meantime, I learned.

So by the time I was sixteen, I was not only doing all the maintenance work in the apartment house with twenty-three apartments--washers and switches and other kinds of things--but I was also doing--with my brother and sister and my mother--painting. We painted apartments. We had professionals coming in to do ceilings and wallpapering, but everything else--the trim and so on--we were doing. This was a lot of fun but also quite a chore! Summertime was when we used to do all of this, so I did not have much of a vacation time, as I said.

When I started doing these weekend trips, which were in the fall and the winter and the spring, with Vic Sharp and Al--my brother went a couple of times but he dropped out. He was in college at that time. I was in high school. The next thing you know, why, Al Christopherson and I were laying down three-inch water line for half a mile from Austin Creek. Fire water, up to ten-thousand-gallon wood tanks. A professional would come up there and stay for a couple of weeks, and I was hired to be his assistant. I learned how to tear down big water tanks, and how to put them back again.

It was really ancient-type work because [of] this redwood tank and you could see the simplicity of the design. There were all kinds of little things. For example, when you fitted the vertical two-inch by six-inch redwood staves, you would come against the next stave. Well, what's to prevent leakage? Believe it or not, they have tules, big reeds, long. And you would cut a tule in half and place it between those staves, and then of course that tule with water would expand and seal. It's an ancient seal, probably used by the ancient Indians, you know? So I always remember being with that man and learning so much about it.

We did all kinds of things. We dug wells in springs. There would be two springs that I remember. One was not delivering enough water for us. This was the drinking water. The springs were just deep cuts sixteen feet deep, about two-foot wide, lined with redwood on both sides and of course bracing in between. But deterioration, the sloughing of the soil, would clog up the system. You have to go into the springs like a mine shaft and then dig out the muck, all the mud and so on, and then you dig and make the spring longer. The more area you had, you cut across this water flow, which is under ground, the more water you got.

I remember how dramatic it was. We were just cutting through, and I was cutting on one side, and all of a sudden just the one shovel full, and man, I was getting twice the amount of water out of a small area than the whole spring before. So I called Al and got him in there, and he said, "Boy, you hit it." So we just put all our energy into that one side, and we increased the amount of fresh water, the drinking water. The spring was up the hill and would come down by pipe into the big tanks, and the big tanks would distribute it all the way throughout the camp. Then we had another set of tanks that were for fire water, pumped up from the creek, a half mile away. A lot of big piping. And we were doing this on weekends and so on.



Then they found out I could do carpentry, so I was doing that, finishing a hospital room and things. And then they started, a year later, taking down the tents and platforms because they would deteriorate so fast, and they put up good platforms which were covered with a permanent roof. These would sleep eight Scouts. They had lockers. It was just sort of modern.

By the way, they found out I could lay roofing paper. The secret is that you would take the roll of roofing compound and you would lay it out where you needed it and cut it to size, and you would leave it and cut the next one to size, leave it and so on. What you would do is let the sun hit it for a day or so, two days, and the sun would heat it and it would lie flat. Then tacked it in. [That was] why there were no ripples or creases. Well, I discovered that all on my own. When they found out I could do that, I was in charge of all roofing. Over a couple of years, we put up about fifty units. I knew a lot about foundations and concrete and wood beams.

Swent: You had a very practical experience.

Maslach: I was doing the plumbing, and they hired a local plumber to come up and do some work. They turned me over to him and I would help him. After about a couple of days, the guy went to Vic and said, "What the hell do you want me for? He knows as much as anybody." So I was doing the measuring and so on; he was doing the cutting and fitting; but I was doing quite a few of the real important things.

At this point I learned how to drive a car [chuckles]. My family didn't have a car, but this plumber had a little Model A, which he had cut down, a Model A roadster, and he put a little truck bed on it and took out the rumble seat. He just said to me--remember, I'm big for my age--he says, "Drive up and get something." I said, "I don't know how to drive." He was appalled at that, so we got out in the fields and he gave me a lesson in driving. So here I was, driving around. I would shift, you know. At the beginning, all I did was put it into low and would just go right up the road, which was not paved, park it, turn it off, get whatever you wanted, turn around and go down in low gear [chuckles]. Never shifted [laughs]. He taught me to shift.

We had a ton-and-a-half truck, a Dodge, and something went wrong with it and it was parked on the side of the road down there around Guerneville. So Vic, Al and I went down and couldn't get it to work, so they went off to get the mechanic. I sat there a while and eventually what happened was--I think I've

got too many people in here--but the guy fixed it, and it was running.

Here was this ton-and-a-half truck. It had a sixteen-foot bed on the truck. And Al just got out and Vic says, "You know how to drive." I didn't have a license. I was about seventeen years old. I got into this thing, and I started it. It had extra gearing because it was meant for commercial-industrial work. I got it into low and then into second, and I just followed him. He was in his car. So I drove several miles [chuckles], without a license.

So these were my experiences that I had when I was really just a kid.

Swent: You were very courageous, I must say.

Maslach: Well, not really. I was willing to try anything, essentially. I was supervised, and if someone said, "Hey, you're okay, do it," I had enough respect for these people that I would agree with them.

#### Working at the Crescent M Camp in the High Sierra

Maslach: The Boy Scout thing blossomed in another area. Vic Sharp started the Crescent M Camp, which was up in the mountains. He basically worked out of Yosemite but not the valley but out of Tuolumne Meadows or Lake Tenaya, that area, up in the high country. I'm talking eight, nine, ten thousand feet as our base camp. The concept was pretty simple. Two or three days of acclimation at a base camp, with day trips--walking, hiking--and then after that you packed everything in your bag pack. And we would have twenty or thirty Scouts and two or three leaders, and we would take big loops.

You would take a big loop over from, say, Tuolumne Meadows and you would go over Tioga Pass, which is 10,000 [feet], and down the other side, and from there you would go down one of the creeks towards the Owens Valley, and then you would go along up the trail and back over passes. One I remember was over twelve thousand foot, and back into Tuolumne Meadows. That was one loop.

Another loop would be north. We would go up to various lakes, and then you would get over toward the Matterhorn area and then come back on a lower level trail into the Grand Canyon of

the Tuolomne, and then back up that steep section from four thousand feet up to nine thousand feet. So this was really my introduction to the mountains, with a real vengeance.

The first time they set up this thing, we had easily a ton of food, mostly canned, and two tents which were set up with wood frames, and we set them up at Lake Tenaya. That's near Tuolomne Meadows. Beautiful area. There used to be a big CCC camp there. It was interesting to look over the ruins of that camp and so on. There was a big pipeline that came from Mount Tenaya, with fresh water. Very wonderful, fresh-tasting water, right from the glacier over there. And we're up here on this level plain as the lake is slowly filling up. It's a glacial lake.

The plan was that we would take this truck and go up there-- Vic and Al and somebody else--just Vic, Al and I, I guess--yes-- we would unload, on a weekend, and we would set up the tents and put all the stuff inside the tents. One tent was for storage of the food; the other tent was for the kitchen. Then you ate outside. Of course, you camped outside under the trees. In those days, air mattresses were not common, so you had your sleeping bags or blanket rolls.

We had quite a time. We went on several very interesting trips. I got my education in San Francisco extended a little bit. There was a man named Mike Powell, no longer around. He was, oh, fifteen, twenty years older than I. He was one of the most wonderful, polite, gracious, adventuresome people that I've ever known. He was from the Deep South, and he had a wonderful, soft accent. It was always, "Yes, ma'am. No, ma'am. Yes, sir. No, sir" and things like that. But he was an alcoholic. Very handsome fellow. He was the kind of person who had lived a life on the road. You know, one step better than the hobos, and he knew how to do anything and everything.

Swent: He was a packer?

Maslach: Everything, everything. You could ask him to do something, he knew just what to do. I remember Vic or Al or I--just two of us --would try to find Mike Powell, who lived in the flophouses on then Third Street, Mission, Howard, that area, which was pretty bad, really, in those Depression days. But here I am, sixteen, seventeen, going with Vic or Al into the bars on Third Street, Howard. You know, very interesting. As I told you, I had my first drink when I was about sixteen!

We would go in there, and Al, say, was with me, and he would order a couple of beers, and these places had what they called a free lunch. If you ordered a beer, you would get a plate, a

small plate, and they would have bread, cheese, ham, all kinds of very interesting lunches, you know. And so we would go there and talk to the bartender. You had to buy a beer in order to be able to talk to him [chuckles]. You couldn't just come in off the street, not doing anything. We asked him if he had seen Mike. Well, Mike was a character. No, he hadn't seen Mike; they had thrown him out and so on. So we tried so-and-so's.

In those days, Third Street was just a line of beer houses. People from the office areas and so on would go there for lunch. It was really very interesting. Sort of like a German *bier stube*. You know, in Germany, the same kind of atmosphere. So we walked down Third Street, looking and sooner or later, we would find him. It was a matter of dragging out and I really mean putting his arm over your shoulder and taking him and just find the flophouse, get his luggage, pay the bill, and get in the car. Somewhere along the line, of course, we fed him and drove to the camp. There's no way out! There were no wheels. It was a long hike to get to a bar. The last time I saw him he had dried out and beat the alcoholism and he was a park ranger in Yosemite Park. He knew Yosemite backwards and forwards. [looking at photos] That's a picture of him by a string of burros that we used at the Scout camp my first year. We only used the burros one year; after that it was always back packing.

But these are people--one is a man by the name of Lou. He came from a prominent family in San Francisco. They owned a big logging business. My brother was there. Lou was an outstanding person. He and I--we all got along beautifully. In the first place, he was one of the most handsome people I have ever seen in my life. And he was an athlete in any sport. You name it. Competitive. Good God! If you were playing baseball, stay away from him. He would run you down. He was just a great, great guy. He was killed on practically the last day of the war against Japan, on Okinawa. He was a captain, flushing Japanese out using flamethrowers and stuff like that in those days, throwing grenades into caves, and a sniper got him. Really one of the great losses of the war.

I mean, I have many people in my family--my brother, for example, was a paratrooper. He actually landed in Japan, but not fighting; at that time the Japanese had given up, but they were scheduled to land, if they had not given up. These are the kinds of people that were in Scouting. I remember another leader, a man by the name of Bob Anino. That man worked as a pianist. He worked for the RKO-Orpheum chain. He played piano in small motion picture houses, which was pretty common in those days, before talkies. But then he also played for the chorus lines. He was a pianist and a very good one. He was also a composer and

so on. Great sense of humor. Came from South America, but what nation I don't know. But Anino. He was a kind of big jokester, a funnyman.

One thing about him that was characteristic was he rarely opened his mouth. He would speak with his lips closed, practically. The reason was he had bad teeth. Bad teeth were a big problem in those days. I mean, let me tell you--this will kill dentistry people that read this--but they had Painless Parker, who was a dentist. You could go down to Painless Parker and have a tooth pulled for one dollar. That was dentistry.

Swent: If it hurt, you pulled it.

Maslach: That's right. So Bob Anino. There was another leader in there, amateur, you know, Boy Scout leader. All I know is the name, Jim. He was an architect. Actually, he became quite a prominent architect in San Francisco. But he was a very sophisticated, intellectual type, you know. Even the people that went on these trips, because they were really exciting trips--they were for Senior Scouts and Senior Scout leaders.

Swent: Were these members of the Lions Club?

Maslach: Oh, no. These were other troops. Yes, this is regional.

That was a picture I took when we were all sitting up on top of Yosemite Falls, where I did one of the stupidest things of my life, but I didn't get damaged doing it, but if you remember Yosemite Falls--

Swent: Yes, it's very high.

Maslach: It's a big drop [laughter]. There's a little ledge in the granite. This is the hard quartz. This is like--I'm talking about something that high [demonstrating] that sticks above--

Swent: Three inches thick?

Maslach: Yes.

##

Maslach: I was just talking about being up on top of Yosemite Falls with a bunch of Scouts. I remember going out on this quartz outcropping which was parallel with the edge of the cliff. I went out there, oh, twenty, thirty feet. I'm able to kind of look down between my feet. A couple of thousand feet down there. And then, of course, you got a good view in that direction of Lost Arrow,

which was the next piece of property up there that had a name. I got back.

The reason I mention it is that not too long after the trip I remember having a bit of nightmare about it; that was it. So for years after I had done that stupid thing, I would wake up in the middle of the night because you could have just slipped off there so easily and fallen to the bottom.

Swent: I'm interested in your photography, too. You had a good camera?

Maslach: No, this was a poor camera, but I always have been able to do photography.

Swent: Nice pictures. Awfully good pictures.

Maslach: I set that picture up. I set the camera up, and I told someone to take it. I did a lot of fishing up there.

Swent: I see. That's a lovely picture.

Maslach: Here's another one of Lou and my brother.

Swent: The other previous one was you fishing in a stream up in the Sierra. And this is Lou and your brother, with some pack burros.

Maslach: Right. This was just a comic thing. You have to kind of look at it very closely, but my brother is in there and Al Christopherson is in there. The person closest to you was Harry Lowe. He was a Senior Scout with us. He was my brother's age. He looked like an Indian. Very dark complexion. He loved to sunbathe. He was just a piece of mahogany. He was a great hiker and very good fisherman and just a wonderful person to be with.

#### Working at Yosemite Park, 1937, 1938

Maslach: What happened was that starting in '37, I got busy in the High Sierra stuff. We rented our burros--mules, whenever we had mules--from the Yosemite Park Curry Company. One day, they noticed me, and when the period was over for the Scout camp, which was two weeks, "Do you want a job?" So I worked for the Yosemite Park Curry Company doing all kinds of simple jobs in the beginning, like swamping out, you know, cleaning the stables and stuff like that, and taking care of and feeding the mules, horses, pack horses--all the pack stuff. I had nothing to do

with the riding people. They were in a different class. But I would go along on rides every once in a while as a dude.

But most of the time--this started especially in '38--'37 and '38--they turned me over to a couple of big, bulky Indians who knew how to do everything. I was to just help them. One of the first things that I remember is that somewhere along the line, the telephone line was broken. It was a telephone line that went from the valley up through Little Yosemite up to Merced Lake. From Merced Lake it went up to Vogelsang camp and down into Tuolome Meadows and then over to Mount Hoffman, Tenaya, and back down into Yosemite. It was a big loop. It was just a simple line with a crank-operated telephone.

So you would go along and you would be watching--sometimes you were hiking where you couldn't use horses; other times on horseback, and you would have a pack mule with food and so on. You never knew when you were going to be stuck somewhere, doing work. You would go along looking for the break. You would see that wire up there between trees. And, of course, somewhere sooner or later a branch fell and took out the wire, or a tree fell and took out the wire. Nineteen thirty-eight was when their big problem was lodgepole pines which were being attacked by the miner beetle, which quickly destroyed large groves of pine. We would hike for miles up to Tuolomne Meadows and not see a living tree but see hundreds and hundreds--thousands and thousands of these pines that had fallen down.

At first there was always the problem of resupplying the camps up there. You would take a string of mules, and you would go to Merced, bring food, and also tanks of butane gas for the cooking. Of course, there was a ranger there; I always remember the ranger's wife. I'm talking about handsome people. But this was just idyllic. A young couple with a child in this beautiful small house [chuckles] up there, nine thousand feet, doing the ranger work and so on. I thought about being a ranger, briefly.

Anyway, I had started working. I worked for them in '37 and '38, Yosemite Park Curry Company.

Swent: All summer?

Maslach: Pretty much. A very strange outfit to work for. You always had to work, but could never build up overtime. They didn't like the idea of paying time and a half for overtime, so if you started running overtime, which of course you do if you were packing outside with parties, you just had to sit around Yosemite Valley or Tuolomne Meadows. There, of course, I would just hike and

climb everywhere, and I just had an awful lot of fun just doing things on my own.

Swent: How much did they pay you?

Maslach: The pay at that time was fifty cents an hour and room and board, which was exactly what I was paid up there--when I was sixteen, seventeen up at camp Roy-A-Neh. That's what I got. And here I was in the camp, looking at all these Scouts. I'm only a couple of years older, and I was being paid [chuckles], doing all this work.

Swent: Were there any benefits at all?

Maslach: No, no benefits. There was no such thing as a benefit. Nothing. You never heard of it.

Swent: What would have happened if you had been injured?

Maslach: I have no idea, no idea. Never heard of anybody injured. Maybe a cut or something.

Swent: It was pretty hazardous work.

Maslach: But I don't remember any benefits at all. The head of the Yosemite Park Curry Company, of course, was the Curry family--Ma and Pa Curry. And the chief operating officer at the time was Tresidder, who later went on to some work down at Stanford and was the vice president of Stanford.

I got to know Ma Curry quite well. Pa Curry was sort of the maitre d' of Yosemite. He was most famous for the voice that everybody heard when they had the fire fall. He would yell up to Glacier Point in that big voice of his, "Let the fire fall." Remember that?

Swent: Yes.

Maslach: Ma Curry was just something right out of the past. She looked very much like the Parisian figures of a Utrillo painting today. I'm talking about, the Utrillo painting, back then, in the 1900s, early 1900s. She had the same up hairdo with big center topknot, which was very common amongst older women. And then she had steel-grey hair. She was just a straight up-and-down fireplug. She would have long-sleeved blouses, practical type, solid color sometimes, sometimes flowery. They were quite voluminous. They certainly weren't form-fitting. She probably did not have the form to fit. She had a long skirt, black, went right down to the ground.



Swent: This is up at Yosemite?

Maslach: Yes, Yosemite. Summertime. [laughter]

Hot. And, you know, that skirt was heavy material. I remember seeing it on the dust there. She had some old-fashioned shoes. I'm pretty sure they were laced up or something, you know? But the most distinctive thing about Ma Curry was that she had, around the middle a belt, which was a key chain. I think it was attached to the belt in some way, or it might have its own separate belt. I can't remember the details of that. But what was most distinctive was the ring, which was about six to eight inches in diameter. You know, just a hundred keys. These were old-fashioned keys, you know? Not the Schlage lock type keys that you have today. The old-fashioned ones that you poked into a hole and turned. Very simple arrangement for opening the door.

Swent: They called them skeleton keys?

Maslach: Yes, skeleton keys. So if you ever needed something (and everybody needed something), you had to go to Ma Curry, tell her what you needed to do. You needed this key for this particular area, and she would look at you [chuckles], you know. She didn't smile much. She was a stern person. She would look at you and ask questions and then take this key ring and find the proper one --none of them were labeled. She would find the proper key. "Make sure you give it back" and so on. "Where will you be?" So she would say where she was going to go. Okay. So you would go and get into the closet and do something or get some equipment and whatever--everything, you know, that you needed--and so you would do this and you would go back. "Okay, Ma," and give back the key.

Swent: That's real hands-on management.

Maslach: Oh, micro-management! [laughter] You couldn't believe. That was a really big operation. I was still doing all kinds of little things, but not much plumbing or not much electrical. Some of it every once in a while, when they found out I knew something about electricity. So it was a lot of fun, but I was mostly in the back country. You know, to be paid and to do work in the back country, you know [chuckles]--goofing off to go fishing. You can't beat it. It was a wonderful, wonderful life.

We got a little slow in one of the years there--I think '38 --and Harry Lowe also decided he would like to work there, so he got a job. He was a busboy and then he was a bellhop down at the

old Yosemite Lodge, which was pretty old. It was the same location but pretty primitive. We weren't having many people coming for packing trips and so on, so the chief packer said that he had a job we could do, take us out in the back country, and put trail markers up. I said okay.

So Harry Lowe and I were assigned horses and one mule. The mule was fitted with a harness which was actually very simple. And behind the mule was a wheel with a counter on it that rotated so that as you went along the trail you measured the distance. One rotation of the wheel was about two-foot diameter--this would be about, I think, it was five feet per rotation. This device measured the footage between where we started and where we wanted to put the first marker.

In the old days, what you had was another machine that had a platen about a foot in diameter, and around the edge of that platen was letters and numerals. And so you would rotate that platen around until you had the proper numeral or letter, and then you would press the device against a tape of lead--lead tape. The platen would impress the letter or the number onto that tape. So to put a trail marker on it--there are still some in existence, I'm sure, in the back country--you would say, Merced Lake space two point zero [2.0].

Our job was to repair all the tapes and also go to a lot of new areas with new tapes. You would go up this trail and what you would do is look for a healthy tree that's going to last for a while, fairly young but not too young. And you would make a tape and tack it onto that tree, right there. Identify it by making a blaze on the tree. The entire park and the Sierra was just filled with markers like this, which were started back in John Muir's days.

You see, before Yosemite became a national park it was under the control of the military. There was a famous Polish cavalryman, and in order to keep his men working and in good shape, they built all the first trails in Yosemite, not for tourists but for fire control. And they would put up markers which were--not tapes but with a slash, a blaze. These trail markers were still throughout the place, and you recognized the different trails that there were. Each trail had a different kind of a marker.

Swent: These were metal tapes that you put around the tree?

Maslach: They would only be about six inches long. And they would be on the surface of the tree. In order to make them more visible, you would take an axe and remove the bark, so you had a wound in the

tree. But there would be a marker. So for about three weeks or so, I had the most wonderful time.

Swent: Oh, yes!

Maslach: Just hiking all these trails. So I can honestly say to you there wasn't a trail in Yosemite I had not hiked and a lot of them I put up the trail markers.

Swent: Wonderful experience.

Maslach: Absolutely. That was '38, and I was in junior college.

### Working as a Printer's Devil

Maslach: But my first job at working was when I was in junior high school, and our Scoutmaster and two of his associates also in the Scouting business--they were both Scoutmasters; they were amateur, not professional--they were in another troop and they had a small printshop. "Printing You Will Like" was their motto. It was first a printshop out on Divisadero Street. I would go there from junior high school and work as a printer's devil. My pay was twenty-five cents an hour. I was about thirteen, fifteen years old. Soon after they were there, they moved down to another storefront, which was on Golden Gate, near Larkin, which was only two blocks from my house. I went to work for them and did printer's devil work. The usual thing is you take type that had been set and break it down and return it into the proper cubicles in these beautiful two-foot by four-foot receptacles for lead type. You had to memorize essentially where each letter would go.

So I learned very quickly, and after a while I was setting type for various small things, like, if you wanted a business card, letterhead, envelopes. And I started running presses, a hand press. They had two hand presses. It was very interesting work because you had to be dexterous. What you did is you would go in first with your left hand and pull out what was printed and then with your right hand take a fresh piece of paper and put it into the proper position. You also had to watch the ink because you had to put enough ink so that you would have the proper, you know, whatever you were printing.

Swent: So it wasn't a continuous press.

Maslach: Oh, yes. It was a rotary press.

Swent: Putting the paper in as it rolled around.

Maslach: And if you left your fingers in there, the rollers would roll on your fingers, which of course you never did.

Swent: Not more than once, anyhow.

Maslach: Then they had a power press which was a bigger press. Every once in a while I would run that hydraulic press which was really quite good. But the sad part of it was that they went broke. So I think the last month or so my money was never collected. I mean, I netted far less than twenty-five cents an hour for the number of hours that I worked there. But that was my first job. It was interesting work.

Swent: You learned to mind your Ps and Qs?

Maslach: Well, I saw another part of history, really. San Francisco had an enormously good reputation for printing. It was the printing center for the entire West Coast. And some of the greatest printers, Grabhorn Press and others, they started there. I met, actually, some of these people. It's amazing how printers are inclined to talk to each other and help each other out.

So much for me and my jobs and so on. Let's spend a few minutes thinking about the period that we're talking about. We had moved from the Depression days of 1929, essentially, into the Depression days of the thirties. But there was an entirely different atmosphere. Roosevelt had been elected, and all kinds of programs had been started. You could see these programs. I remember walking around, for example, in the 1932 period, seeing, you know, those apple stands and people selling apples. I used to go down to the waterfront a lot. That was pretty bad, you know. Harry Bridges was just beginning to get started as a labor leader, but there was still a long ways to go.

You could just see the misery of those Depression days. As I said to you, I once in a while felt that I went to bed a little hungry. We have had nothing as bad as in those days. I recall the great strike of 1934. I would, as I said, use my roller skates and I would go down to the waterfront. When they had that general strike, the National Guard was called out, and on top of all the piers were machine guns and people, soldiers. There were pictures in the paper, so you knew it was for real, you know? There were soldiers down on the waterfront.

Nineteen thirty-four was when they had the shooting which resulted in the death of--I think it was a longshoreman, but I'm not sure. A union member, that's for sure. I just by chance was

in that area. I heard a shot and I just skated over there, and there is this guy. The second time I saw a dead man with a bullet wound. So I just was in the middle of this great upsurge of activity. It was chilling to see so many of these things.

Also, when we would go with the Boy Scout camps up in the Sierra in the summertime, we ordered food and we would buy fresh food on the road. Of course, between here and Yosemite, you have wonderful food markets--Modesto and Merced. We would buy cases of fruit for twenty-five cents or ten cents. Five cents for a lug of tomatoes. You would see all this beautiful food. At the same time, you had that image of those people in the city with no food. As Roosevelt pointed out, it was a matter of distribution, you know, getting it there and so on. I always remember seeing this.

### Galileo High School

Maslach: Of course, as I grew older, why, I got to the problems of schooling at the high school level in which I had teachers who educated me for the first time about the internationalism of our society and the fact that there was a big world out there, not just the United States. I had great teachers in high school, Galileo High. I can remember, to start with, Mr. Bartholomew, who was teaching geometry there at that time. Age fourteen and a half, I met Doris Cuneo, who was sitting in front of me in that class. She was thirteen and a half. She turned around, they had these backs to the seats, you know, and she asked if I had gotten a certain problem. I did and so on. I remember a girl put her arm back over that ledge that stuck out the back of your seat, and one of the boys would always push down on her elbow, you know? Which would hurt her a little [chuckles]. So there was teasing starting right there, at that age.

But he was one of these teachers in the Depression who came to school in three-piece suits, and the vest was perfect and the tie was out of this world. He was an outstanding mathematician who could explain things beautifully. I remember my senior year --just to jump around a little here--I had a teacher for civics. She was actually an attorney; passed the bar and so on, and was teaching because there were no jobs for attorneys. She was outstanding in teaching you modern history of the world.

Swent: Do you remember her name?

Maslach: Miss Lyon. She was a real outgoing person with high standards, and a sharp, sarcastic tongue when she needed it. But she was a person who really had a true liberal viewpoint of history in the modern day, and she was imparting this to us as teenagers. Remember, my senior year was 1937. Spanish Civil War. The Germans and Italians in Spain. The dive bombing of Guernica, where the Germans showed what they could do. And Franco, Hitler.

Swent: Your family had not maintained contact with anyone in Poland?

Maslach: We had maintained contact, but in those days things were very bad, and we were playing it safe. We did not talk too much. So we were a European family, of course, through our Polish home clubs and dances and all those things. But in terms of politics, it was my father who was, of course, with Roosevelt, helped him in '32 and so on, and continued to support him. We have these letters from Roosevelt, thanking us. Things like that. So we were active, with Hiram Johnson as the senator who came to our house quite often. And then there were all these other local politicians.

##

Maslach: I was aware of the international politics. As I told you, I was an avid reader and certainly reading history was one of the big areas I was active in. But there was a person like Miss Lyon who could put things into proper perspective and showed you the relationships of things that had happened. Things happen. You have to understand what was happening. The Civil War in Spain. The first major part of the conflict. But it had so many subtleties in it that you had to know who the players were. Who was Franco? Where did he come from? What troops did he have? And who did he bring over? Well, he brought over the Moroccan troops, which were terroristic in the Spanish Civil War.

This is where my education took off--I really began to think independently. Junior, senior year of high school. Mrs. Metzger was my English teacher. Tall, spare woman, wonderful ability, great interest in literature, especially of Shakespeare. We went through a variety of Shakespeare plays and what have you, and she just didn't give us the kind of shallow overall picture of Shakespeare. We went into the words, and you figured out what was being said, in substantive terms of the times of the play, and you learned a lot about politics, if I could put it that way.

I mean, when we studied *Macbeth*, I mean, you take that first scene of the three witches and a pot boiling. They're giving you a lot of history right there. Very sharp. [tape interruption]

Swent: She must have been a wonderful teacher.

Maslach: Well, all of these teachers--there were many others. In mathematics there was an older man whose name was Mr. Rockwell, teaching trigonometry, you know, and solid geometry. We had top, top teachers in those days. I don't know if they were teaching us the way you would be taught in college, but there was a sophistication to the teaching there in Galileo High School that I'm--it's still remarkable to me that the teaching was at that level. I think in large part it was because of the Depression days. The quality of the jobs, the quality of the people in those jobs--but the teacher's job was a very highly respected job, and the salaries were quite good for the Depression days.

But it was at that point in my life that, as I say, I started to become an adult and started thinking in global terms and also started thinking of what I was going to do as a career. I had always leaned towards the science and mathematics areas, but I was never pushed by the family in terms of what I was going to do, except at the beginning where, I said, my father said, "One of you a lawyer; the other a doctor." I had no interest at all in the medical field. I just ignored that totally.

I read heavily in the fields of shipbuilding, naval architecture, and for a while there naval architecture was sort of my first choice. Later on, it broadened into architecture as well as naval architecture, and for a while I gave serious thought to architecture. But I talked to people, and, in the first place, there was very little need for architects in those days. Very little building going on. And so all these jobs did not have the promise.

It was not until, really, junior college days that I really settled that it was engineering. And for the first two years of the college experience you do not have to make a decision about the sub-specialties that you could go into. But the point that I was kind of making was that I was beginning to see the world in this whole thing, and San Francisco is such an exciting place to live, as I've tried to point out to you.

For example, when they had this opening of the [World's] Fair, on Treasure Island, I knew that the place to go was Telegraph Hill, where you could see the lights when they first came on. I remember those days. I can even tell you walking down the street that I was looking for a good place to stand or sit. There was a party going on in a house at the end of the street. Today Telegraph Hill is filled with private homes and condos and apartments. Very wealthy people. But in those days it was family houses. "Hey, you want to see?" So there I was,

on the deck of Italian families' homes, looking right out toward Treasure Island.

Of course, the next thing you know, I was drinking wine and eating their food, and then the lights going on. That was a great, great thing to see. Roosevelt pressed the key in Washington and the lights went on in San Francisco. You walked back home through Chinatown. You would do all these kinds of things that were so different.

Swent: You haven't mentioned the bridges.

Maslach: Well, in 1939 they were open, but they started building around '37. If you were to think how fast that was done--two years. Today it takes you two years to go through the paperwork to get a license to do it, you know? The environmental report is a year. These were days when everything just went! The reason the bridges were built so fast, of course, is it's a big union town with lots of people who knew how to do mechanical work. The shops down south of Market were big and we could handle all those things. We had the steel company right there. So many people wanted to work.

You take a look at the pictures of the bridges being built. It will always come to your mind, Look at how many people there are working. You go out on a construction project today, you don't see anywhere near the number of people. It has been mechanized and a lot of machine tools and/or big equipment for construction, which we didn't have in those days.

Swent: Your father did not belong to a union?

Maslach: No. He was not a union-type worker. He was sort of a handyman in a variety of things.

I suddenly remembered I forgot to tell you that back there when I was fifteen, sixteen, I went up to the Delta with the Andrews family, and we would be on the boat, living on the boat, and doing all kinds of swimming and sports activities and so on. Nadine at that time was, like, seven, eight years old. I was like the older brother, you know? We just spent an awful lot of time together. Interesting times. I was up in that area very recently. I'm talking Walnut Grove, Locke, that area. We would stay at Steamboat Slough, for example. Many, many small yachts would go up there and stay the summer. Hot. Hundred-degree temperatures. Dry. It was quite an experience. We would be up there only two or three weeks.



But when I was sixteen, I wanted to point out, that I had my first drink in the bar of the Walnut Grove Hotel, which was one of these big, beautiful, great hotels. The bar was, oh, fifty feet long. The most beautiful mahogany bar you had ever seen in your life. And there were all these big jars at the bar. The jars contained asparagus. Big asparagus country. In the jars, sealed, would be the prize-winning asparagus of 1932 or something like that [chuckles]. The winner of this or that. It was agriculture country. Very big in Asian labor, stoop labor.

Swent: Locke was all Chinese.

Maslach: All Chinese. I remember some of my Chinese schoolmates at Galileo High, which was of course heavily Chinese and Italian in those days. The Chinese people were working up there.

One night we went down to the hotel to have dinner. We were entertaining a couple. I think it was Bill's cousin. We went to Locke. I don't know if you were ever inside some of these old buildings. This was in the heyday, in the thirties. It looks like a theater on that levee, a sign saying "Theater." It was a theater, but after the show was over, down below the theater was a gambling joint. It was all Chinese gambling amongst themselves. Of course, they would love to have the Caucasians come in and supply more money.

But they have a game which was explained in one of the museums up there in which basically there are a lot of markers on the table, and they would be shuffled and all these Chinese are just screaming at the top of their lungs and making bets with each other and so on. You couldn't believe the bedlam. It would just drive you nuts to stay there for a long period of time. And all of a sudden, the man who's in charge [slapping table] just clamps down, like, a big bowl on top of the markers and takes it out. The whole bet is on the markers left under the bowl. It was either one, two, three, four. You bet it in groups of four. Okay. The zero, of course, was not the last straw. That's a zero drawing.

Swent: Sort of like jack straws.

Maslach: No, pieces.

Swent: Oh, tiles.

Maslach: Tiles.

Swent: I see.

Maslach: Not a word is spoken as he pulls out four at a time. You know, lifts the bowl, four at a time, four at a time. You win on the basis of one, two, three, four.

Swent: How many there are.

Maslach: Simple game. You can still hear that game in Chinatown. Every once in a while, you can walk down Grant Avenue and then take the side alleys. In a lot of the side alleys you can hear out there. Even on Grant Avenue you can hear. You hear the tiles.

So here I am, sixteen years old, drinking right and left and going to gambling joints!

Swent: You weren't gambling, though, were you?

Maslach: No. I had no money to gamble! You know, it was true also in San Francisco. San Francisco was a wide-open town. Unions controlled. You had your Irish, your Italian, you know, Chinese sections and so on. It was kind of self-policing.

Swent: But you were wandering very freely.

Maslach: I was in the middle of the town. And I tasted all of the different areas because I was right there. High school, I was with Italians and Chinese; John Swett junior high school, predominantly Japanese because that was next to Japantown. So I mixed with everybody and anybody, you know? Some of my best friends, one was Basque, on the other side is British; over here was French. It was a very wonderful way to grow up, you know, San Francisco.

As I said, because I was big, I would go downtown. I would be in the downtown area. And where Sutter and Stockton Street--there's a big city garage now, ten stories high--there used to be an old building. On the ground floor there were shops, but on the second floor there was a nightclub-restaurant place, famous for serving some kind of food. Let's say chicken or something like that. But there was a big bar, and they stayed open all night long. I mean, none of this two o'clock, you know, which was the legal limit. That place was known everywhere; you could go there any time of day or night and get a drink. And I'm talking three or four in the morning. Every once in a while they had a jazz group. Generally, it was just a drinking place.

Down in that mercantile area there were so many wonderful little restaurants. I saw the Iron Pot has disappeared, but it was one of the best places to go and have a meal. I knew these

places because quite a few of them would ask my father to come over and fix things. So I wandered. I wandered everywhere.

Swent: Do you want to follow up on Doris now at all?

Maslach: Hang on a sec. I still have a couple of thoughts still not put together, but I thought maybe we would start with Doris and so on in our next session.

Swent: All right.

Maslach: Because we're going to get noisier with time here.

Swent: I'm afraid so, yes, yes. Okay.

Maslach: So the point that I want to make is that I could just go anywhere, anywhere in the city. I was living on Larkin and Eddy. If you know San Francisco at all, this is on the edge of the Tenderloin. And so if you walked down Turk Street or Eddy, prostitutes would come up to you all the time. You got to know another part of life.

I always remember just a half a block away from us, up Larkin Street, in an old apartment house, small one, between Ellis and Eddy, on the west side of the street--one day the police cars and a police wagon rolled up, and the police went into this house, this apartment house. So I decided to be doing a chore of buying some food for the family in the market, which was right across the street from this apartment house. I was just standing there, looking. It was a house of prostitution. I never knew it was there. I knew the gambling joint on the corner, but I did not know about the house of prostitution two doors away. The madam and all the girls went into the wagon.

I recall this so vividly because two of the girls were wearing Commerce High School senior sweaters. You know, the senior sweater was a cardigan with an insignia of Commerce High. Wool. Wonderful sweaters. I remember mine from Galileo; I used it for so many years. But all of a sudden, you realize where you were living. In this whole area.

For example, Adams School, where I went to the grade school, would come up there and use the playground area to play handball and so on. One day walking away from the school down the alley, all of a sudden cases of wine and liquor were being thrown out of the third floor or so of this club. Well, it's a great jazz joint and rock club today in San Francisco. It's on O'Farrell Street between Polk and Market. Beautiful, beautiful club.

In the old days, it was a club and a restaurant. I remember going there and seeing the original Topsyies. They were the twins--I mean, the two girls who played Topsy and Eva. But it was an illegal liquor club. There was an alleyway behind this place and an empty lot which had a lot of groundcover and concrete fill. The police were there and just smashing all this champagne, scotch, bourbon. Of course, all the photographers were there, taking pictures.

The next day I remember Michel and I going to--it stank to high heaven of liquor--but we would go and find the bottles, necks of the bottles, because all of the necks of the bottles were covered with tinfoil, heavy lead foil, really. And so we would be unwrapping these things, crunching all this broken glass. We got out, oh, about fifty pounds of lead foil. The next time the rags-bottles-sacks man would come around, and we sold him lead foil. Lead foil was very valuable. You got good money for lead foil.

Here is this great, beautiful--even today--club, nightclub-restaurant and the back side of it, Prohibition. All this fabulous wine and champagne and scotch and what have you being thrown out and dumped into this lot. So what was I doing the next day? Salvaging all the lead [laughs]. I think that's kind of a picture piece of my life.

Swent: There's always someone who benefits.

Maslach: But you were always doing these inner-city things, you know? As I look back on it, I realized how I grew up because I learned not so much in school but I was learning the real nuts and bolts of how to live, you know, right there. It was a very, very wonderful time.

Well, I wanted to finally close this session--

Swent: Did you get good grades in school?

Maslach: I always had good grades. The reason I went to community college rather than the university was that I had an advisor who just did not advise. The grades were no problem. My scores on the tests that we used to take in those days--not SAT but, oh, Minnesota tests, aptitude tests. There are six parts to it.

Swent: The Regents? The Regents exam?

Maslach: No, no, not a Regents. Nothing that formal. It was something that was purchased. It was Minnesota Multiphasic Aptitude Test. And the back side of the test there was a page for your scores.

I remember going to the vice principal because I was going to college and university, and this is the kind of advice you got. Here was the six scores, six columns. I was up there at the 99th, 90th percentile. All the same scores. He looked at me, he looked at the scores, he says, "You can do whatever you want." That was the advice! What do you want to do? Just do it. I didn't know what he was talking about, he said, "You can do whatever you want." And that was the total of my advising.

The advisor who approved my courses made a mistake. It was a simple mistake if you know how to read, which he didn't, obviously, because it said you had to have two years of one language. Well, I had one year in Spanish, and I realized that that was not very valuable for science, and French or German would be better, so I proposed French. He said, "Sure." So I had one year of French and one year of Spanish. I had two years of language, but it was not one language. I had the scores and so on.

So--I don't know if you want to go any further. Is it still quiet enough? Do you still have tape?

Swent: It's quiet right now. And I still have tape.

Maslach: Well, let me just kind of introduce the next stage of growing up. This is college. Did I show you that picture?

Swent: No.

Maslach: This is kind of a better picture of my father, I thought it captured more of his character. He's dancing with our daughter. She was about, let's see-

Swent: She looks about eight, maybe?

Maslach: About five. And this was when we were living back East, and they came back and visited us.

Swent: Isn't that sweet. This is Christina.

Maslach: He was a great dancer, a Polish ethnic dancer, and he would do these costume dances, as I told you earlier, you know, in the Polish house. You know, with great pounding of the foot on the floor, the Krakoviak, especially. It was a very wonderful dance. But they had all the other dances--the Polonaise and waltzes and what have you.

Of course, in the high school period is when you, of course, learn, amongst other things, that there are girls in this world.

I was a quiet one. I would sort of sit in the back of the class and slouched down because I was big and did not want to get called on. I never took a book home in all my high school. I would do all my work during the study hours or lunchtime. Stay a little late, maybe.

Well, the different women that I met during that time were really very interesting. Doris was one of the first. We met there in geometry class. Mr. Bartholomew's section. But there were other people that we met. She and I--one of her best friends was Shirley Hicklin, who we just met and talked with and in fact visited down in Carmel. She came from a well-to-do family in the Pacific Heights area. What they had at Galileo High was Pacific Heights; Marina, which was less wealthy; and then you had North Beach and Chinatown. Those were the four groupings that came into Galileo High.

Swent: Interesting mix.

Maslach: A very interesting mix in those days. And then a group, in which I put myself, that came from other parts of the city. I was downtown. Because Galileo High was supposed to be good for science, and that's what I wanted, okay? So there was a sprinkling of that, but they were not a group. There were some individuals in this whole thing. So life was dominated by these different groups.

Doris, for example. Another very good friend of hers was Carol Woo. She was Korean. They had a drycleaning establishment. This was the wonderful mix that you had. Doris Ravizza was a cheerleader, Jean Deckman, Lee Ham from the Marina and so on. These were all people that we had in our classes. It was a track system. Let's face it. Because we had shops there, and a lot of people went into shops. Not too many of the Asian and/or Italians actually were in the actual track to go to the university. We had a lot of very good athletes there. But it was a very metropolitan type of a system.

So my friends were friends from the area, like Michel, plus a few others, whom I picked up from the Pacific Heights-Marina area. I did not know too many Italian families. I knew a few Chinese families and a few Japanese. One of the big Chinese families had one of the big nightclubs there in Chinatown. He stayed close to me. We were in some classes together. He would ask me questions when the problem of language became a major problem for him.

But one of the students we had was an older Chinese student who was a houseboy. He was in high school to get his diploma

part time. Boy--he could have been forty, for all I know. He was one of these Chinese who lived in a little hovel in the basement. So I learned from him what life was like for the Chinese. I picked up a lot of values from both the Chinese and Japanese, who were the ethnic minorities in those days.

I'll finish off with a couple of stories. I one time asked Jean Deckman, who was queen of the prom--Lee Ham was the king. I asked Jean, "Hey, what do you consider to be a good date? Give me an idea of what you'd like to do." Well, in those days, you didn't have that much money, so she said, "Well, get a car."

##

Swent: So if you had a car?

Maslach: You would pick her up and you would go down into the North Beach and you'd have a meal, which is running at the most a dollar each in '37, and then you would go lobby dancing.

Swent: Lobby dancing?

Maslach: Lobby dancing was a big thing in the thirties. We had big bands, and we had good bands. And any hotel had a band. At the Palace Hotel--if you remember that. Remember that enormous lobby all the way from Market Street that goes all the way through there? Well, all you had to do was open up the door and the dancing is inside there. But what you did was dance out in the lobby. The manager was smart enough to know that these kids, from Pacific Heights especially, are going to be the future generation, and so they would roll up some of the rugs. They had a nice marble floor to dance, and you had a band. Right there.

The owner of the Mark Hopkins, his son, Hart Smith, was in our class in '37, Galileo High, so people would go there often. Students were welcome there for lobby dancing. The Fairmont lobby was enormous, but they had rugs down, so what you would do is you took off your shoes, and it was essentially a sock hop--you know, dancing with your shoes off in your stockings. So you do these things. We would all go to some place and have something to eat and so on, and then go home.

Doris went ice skating, and she was taken by a classmate who was named Andy Benton. She was his date. And Andy asked me to go along, so we had a threesome. Andy had a car, and we went ice skating. Then after the ice skating--I just talked to her the other day about this because I was reminiscing and said, "Where did we go out to eat that night?"

She said, "I don't know."

I said, "After we went ice skating." We drove down to Market Street and then we went to a Greek place up there about, oh, 12th and Market, somewhere in that area. And we had fried banana fritters. Just beautiful. And very Greek. You know, with honey and so on. And wonderful Greek coffee. You know, dark coffee, heavy coffee.

I'll finish up. We'll be thrown out in a minute. I had my first real date, this one with Andy and Doris was of age seventeen. But I had a crush on a girl who was a year younger, a year behind us, and her name was Angelina Mosconos. Truly Greek. Little angel. Well, she was in the Spanish class. I met her when I was a sophomore. She was on the smallish side, and then she had a growth spurt when she was like a junior or senior, and so she ended up--Doris and I met her years later, when we were back here I believe it was the 1950s. ~Just by chance, we went out at the zoo. Met her and her husband and their children, and we had our children. She was this tall beauty.

But in high school, she was this little person about five-foot-two or -three. She had very tight black curly hair, and she had black eyes. Very pretty face. And she was really a darling. Everybody loved her. She had so much vitality. She was always vibrant, always talking. She lived on Larkin Street, I walked back home with her and so on, carried her books.

We had one great date. "Hey, let's go see Disney's big new thing." This was "Fantasia." It was down at the Geary Theater, special sound and so on. Great. So I picked her up at her house, met her parents for the first time, went to a matinee, and she was duly impressed with my suit. So we go down there, take the cable car, Hyde Street, practically from her house. And the Hyde Street cable today. You can't get on it.

We went down and transferred into the second cable car that went down O'Farrell Street all the way to Market. We got off on Powell or Mason and walked up to the Geary Theater, one block. And we saw "Fantasia," which was fabulous! First you had to reserve seats, so it was kind of a special thing, not like going to a small movie house. Inside the Geary it was very, very nice.

Then we went to a place on the corner of Mason and Geary. It was called Tiny's, Tiny's Waffle Shop. This was a branch, but they had several. What they had was very simple: waffles. What made it good was that they had all kinds of toppings. You even had toppings that was like a menu for a dinner. You could have



chipped beef, creamed chipped beef or even have something else which was essentially an entree, on top of the waffle.

Of course, in the middle of the day, we would take the toppings which were, of course, all the sweet ones. What we both had: ice cream with fresh strawberries. It was like a strawberry sundae on top of a waffle. The waffle is warm.

Swent: Sounds good.

Maslach: Oh! This was just wonderful. Kills your appetite for dinner [laughs] because it was like--it was big. A waffle, a big waffle, all those big scoops of ice cream, whipped cream and strawberries, you know. And it was generous. It was a big waffle. So I took her back home and said good night, goodbye. It was actually, as I said, all in the daytime. That was a good date, and I was out, you know, taking a girl to see "Fantasia" and I go to Tiny's Waffle Shop, and had to ride to and from her house on the cable car. That's a pretty good date [chuckles].

Doris and I started dating when we were in college. That was an entirely different period of time. We ought to quit.

Swent: I think it's a good time to quit, yes. You did a good job.

### Opportunities During the Great Depression

[Interview 3: September 29, 1998] ##

Swent: Our previous interviews were at the Faculty Club, but the noise was a problem, so today we're in Room 406 at Cory Hall.

I thought it might be helpful if we go back a little bit. You had gone up till the late thirties. You talked some about Galileo High. You didn't mention your graduation. Was that an event?

Maslach: Well, I think I should go back a little, a few steps, simply because I recognize the same thing that you did. What I was trying to do in my answers to your questions was very simply to give you an overall, broad picture of society as it was in San Francisco and society as it impinged on my life. I realized that living in the Great Depression, many people must get the image that we were limited in what we could do and what kind of life we could lead. In certain ways that was true. Luxury items weren't things that you could afford.

But the availability of public activities was just enormous, and I, by just being more aggressive, had developed a career in yachting, for example. What you did was go down to the yacht harbor and just hang around, and eventually a yacht owner would recognize that there was this poor kid up there that wanted to go sailing, and instead of just saying, "Hey, let's go sailing," he would say, "Well, how about polishing some brass?" And so you would work your way into the sailing opportunity. This is what I did.

For example, not only with Bill Andrews, who I mentioned earlier, who was a shop teacher in junior high school, but with a famous yachtsman, "Pop" Stevens, who won the big Diamond Cup in the 1915 Fair. Pop's son, Dave Stevens, was a very well-known Bay Area yachtsman, with many, many championships to his credit. And I sailed with Pop for years, and it was just wonderful to be able to experience that kind of life. So that there were things you could do if you just decided you wanted to do them. Ice skating was a big part of my life in the high school period, and, of course, the Boy Scout work and the work up in the mountains began at the same time.

### Galileo, a High School for Science

Maslach: Getting back to the high school activity, which I seem to have given you very short notice on, it was a high school that was designed in the old mode of having a theme. And the theme at Galileo was science. We had an observatory and so on. The teaching in those days was, in my opinion, great. I had teachers in English, mathematics, and science, chemistry, physics that were outstanding, people that I still remember.

Swent: You had mentioned Bartholomew.

Maslach: That's where Doris and I met, in his geometry class. I don't know if I told you the story of--in solid geometry, in senior year, she was the only girl in the class, and she was about fifteen, a specialized senior class. And a very difficult problem was assigned, and she was the only one that got it. So she was talking about it ahead of time. We always checked to see who got what problems. And so she was called upon to put another problem on the board, and then all the rest of the people beyond C, Cuneo, did not have the next problem.

What I did was to rip a blank page out of my binder and walk past her desk and took her problems and went in the back of the

room and put that problem on the board. Well, of course, all the boys in the class were booing and hissing and making noise, and the teacher, an older man, did not understand what was going on. Fortunately, the class ended before I had to explain the problem [chuckles].

Years later, when Doris and I re-met after I was in community college--we re-met very close to the Campanile on the Berkeley campus. Her first comment to me was, "Who is doing your math homework for you?" [laughter] That is something that she still remembers to this day. Her claim was that she was afraid that if the problem was wrong, that I would turn around and say, "She did it."

But the teaching in English was especially good, in my mind, in the senior year. Mrs. Metzger was outstanding, and she was big on Shakespeare.

Swent: You had spoken about her.

Maslach: We read Shakespeare right and left, and performed and did everything. The head of chemistry was a well-known professor of the community college and he was also working part-time at Galileo High. Our physics professor was an astronomer who was the head of the big astronomy laboratory that made telescopes here in San Francisco. He was truly, you know, a gifted person in this regard. So we had outstanding teachers.

Swent: And you said you had an observatory at the school.

Maslach: Just a small observatory, but it was a real observatory, and you could go and observe and so on. So the whole concept of these specialized schools--Commerce, Polytechnic, Lowell (for academics) and Galileo (for science)--stopped about that time, and general high schools were built after that point--Lincoln, Washington, and so on. We got away from that concept of teaching at the high school level, specialization rather early in life.

Swent: What do you think about that?

Maslach: Well, I think it's far too early to specialize in that regard. The concept of taking students who through some examination at the junior high school level and think some are fit only for working in shops and sending them to a school which was heavily shop-oriented is a bad concept, in my opinion. Similar to the European concept in which at about eleven years old you take an exam that really structures the rest of your life. I have never felt that was a good idea. Later in life, I determined that there was an even further extension of that concept and that the

real specialization really should occur at the junior year of college, which is essentially what we do here at Berkeley.

Getting back to the high school, there was a wonderful mixture of multi-culturalism, to use a modern term. We had a very large Asian population because Chinatown was one of our biggest contributors. And then we had a very large Italian population because we were in the North Beach. Then the strangest group that came in third was from Pacific Heights. We had a very wealthy operation. People like Richard Goldman, who is known, of course, now for the Rhoda Haas and Richard Goldman Foundation. They give these major awards on problems of pollution and ecology in the universe here.

But there are all kinds of people that came from Pacific Heights, who I think I might have mentioned. One of the women I knew later married a professor here in English. It was just a tremendous feeling of real scholarship from the people in Pacific Heights. They set the sort of the cultural tone, if I could put it that way. They were the ones that were in charge of all the literary and/or theater operations. Of course, amongst them were some of the top scholars in the organization.

A name that should be familiar to you, Nathan.

Swent: Harriet?

Maslach: Harriet. Well, her husband was one of my classmates in high school.

Swent: Ed Nathan.

Maslach: Ed Nathan. So we had this combination. And I was in the fourth group, which was the people who were not tied into any ethnic group, just sort of generally from the rest of San Francisco. I was living at that time down on Larkin Street. The streetcar right past our house went directly to Galileo High and I often would walk through Polk Gulch and that area, you know, coming or going to the high school.

Swent: What about the Fair? The World's Fair of '39.

Maslach: Thirty-nine.

Swent: You graduated from high school in--

Maslach: Thirty-seven.

Swent: Thirty-seven. So that was in your community college time.

Maslach: Yes. Let's finish the account with the high school and the graduation. I had plenty of buddies and so on. There was no, to my mind, real cliquishness. Some people sat in the courtyard of the building; some people went to the cafeteria; some people went over to the gym; and some people were on the south side of the school, where there was a wall which you could hoist yourself up on and sit, and there would be maybe a hundred people up and down that street, sitting on that wall. People would talk to you.

There was a lot of teasing going on. I can't say flirting. People didn't date in those days, and so it was more talking to each other. Of course, as I said, I think the women wore a uniform one day a week.

Swent: No, you didn't mention that.

Maslach: Middies and long skirts. And so every Tuesday or Thursday or something, why, all the women throughout the school were in the identical costume. This blouse with a scarf, navy blue and so on. And then long skirts that went practically to the ground. They went to the ankle in those days. Yes, middies. We recently--Doris, that is, had a reunion with some of her girl friends of the high school. Nine of them. At the Metropolitan Club in San Francisco. One of the women made place cards. She made a copy of a big photograph of the entire class, and she clipped out the individuals at that luncheon and how they were dressed. They were all in middies. And their skirts were right to the ground.

Swent: What did you wear? What did the boys wear?

Maslach: Oh, the boys--jeans were never seen at that time. You did see something that might have been a chino-type of slack; in other words, a lower-cost slack, rather than a wool slack. And then there were corduroys, which were used a little bit. But I think that in general you would say that slacks were fairly common throughout high school. Like I am dressed now.

Swent: You didn't have T-shirts in those days.

Maslach: No, no. It was pretty formal for a society. It is amazing how kind of strict it was without any written laws or regulations; in other words, that is the way you did it. That's all there was to it. People did not have money, and so style was not the big thing, unless you were in the wealthier classes. We had just a wonderful rapport with people from all groups. I still remember one of the Chinese students by the name of Leong. I think that was close to it. He came from a family that was in the nightclub business in Chinatown. He was a good athlete. We just sort of

saw each other everywhere and talked to each other. We were in the same math class, I remember. We did problems together.

I prided myself on being able to do all my homework during the day and not taking the books home at night. I would do that by using the study period which we had plus the lunch time period, so there were two hours in there that I essentially worked on--sometimes I would be with a group in the cafeteria doing math problems or something else, and then another time I would be somewhere else doing science problems or what have you. But the Chinese, the Italians--I mean, some of my closest friends, colleagues there were, you know, of these ethnic backgrounds.

We would play ball together; we studied together; we did homework together. We did everything. There was no social contact in that regard, but we did have lots of contact in the school. Compared to today and all the alarms that you read about and so on, we had a much, much better ethnic operation.

After going to lunch and doing work and then going to the afternoon classes, I often would go down to the yacht harbor and hang out there and then take a streetcar home from there. So from three to five I was down in that area.

### The 1939 World's Fair and Beginning of Maturity

Maslach: The Fair started, really, or the preparations for the Fair about 1937, with the building of the bridges [Golden Gate and Bay]. I knew people who worked on the bridges and so on, so there always was an interesting thing for me to watch. The Fair was just a fantastic operation. I think I told you already that one night I decided to see the opening, and I went up on Telegraph Hill. I was invited by the Italian family to sit with them and eat all that fantastic food.

Swent: You had mentioned that, but you didn't say anything about going to the Fair.

Maslach: Well, I went to the Fair because the way to go to the Fair was to use the ferry. I took the ferry from the Ferry Building. There was a shuttle, just constantly back and forth. So you would go from the ferry to the west side of Treasure Island, and you would disgorge a thousand passengers and kind of go on through everything. I remember all kinds of separate, little aspects of the Fair, rather than the Fair as a whole. I was very intrigued

with the foreign exhibits, for example. Since I was a musician, I also was intrigued with the musical work. They had a group from Central America that would perform. Say, Guatemala or one of those countries. And it was just wonderful, just to sit there, just to listen to this music, which was so different.

I think that I started to get a little international at that point. Up to that point, I think I was pretty parochial from California, but I began to understand--and, of course, it came with, as I told you, a class in civics, where we studied essentially the Spanish Civil War, 1937. So I began to, you know, kind of go into a new phase.

There was not the intense pressure to go to college that there is today. To think that you could go to college and so on for people of wealth was automatic, yes. But for anybody lower than that, that concept of going to college was pretty big. I was told by Bill Andrews, the shop teacher in junior high school, that I should seriously look at a shop job because I was a good machinist. And someone else told me something similar, you know, later on. So we were being constantly pushed into getting a job. Getting a job was very, very important.

Swent: From your family, you said there was pressure for college.

Maslach: Oh, yes. My father--I can still see him standing there and telling us that we were all going to go to college. Two boys. One will be a lawyer, and the other will be a doctor. My brother, of course, became a lawyer. It's interesting you bring up the question of graduation because we graduated in 1937, and that's when the [War Memorial] Opera House was very new. We graduated in the San Francisco Opera House. You know, cap and gowns and so on. Doris was the salutatorian, and I was back with all the rest of the boys [chuckles] somewhere, and we just had a wonderful graduation. Lots of pomp and circumstance, you know, including of course the music. But it was a large school, with a large graduating class, and it was a major event. It of course was reported in the newspapers and stuff like that.

I, in '37, summertime, had a job to work with the Crescent M Camp, as I said. That's when I got started up in the mountains and with the Yosemite Park and Curry Company. Incidentally, since our last meeting, I have been up in the mountains. I stopped in at Yosemite and spent a couple of nights in Camp Curry, in one of those old tents.

Swent: Did you really? [chuckles]

Maslach: [chuckles] They cost a lot more now than they did in those days. But it was kind of a little *deja vu*, you know.

The need to get a job was--part-time job or something, you know--was constantly there. And since we had this apartment house down there on Larkin and Eddy Street, twenty-three apartments, that itself was a job. My mother managed it. My father, of course, had at least two jobs all those years. Every once in a while, there would be an empty apartment, which was in pretty poor condition. It was a brand-new building, but we all in the family went and worked, peeling wallpaper, painting and cleaning, you know. Everything. I mean, it is amazing the things that we were able to do.

My father, of course, was an expert in this type of activity, and I soon picked up a lot of that from him. As I told you, I believe, I used to go out with him on jobs at night and would go back home to pick up a tool that we had forgotten to bring or something. So I got to be a pretty good maintenance person, myself [chuckles]. In fact, last week I was up at Sea Ranch doing maintenance on one of our big doors, which faces south, and the windows leak because of the weathering, you know, of the window stripping. I am replacing sixteen individual wooden pieces on that big door. It's a lot of carpentry and--delicate, more like cabinetry.

Swent: A useful skill to have.

Maslach: I have always done this. I have been able to maintain houses, boats, whatever.

But I think that '37 became a very, very definite turning point. I think that that is when my maturity started, age seventeen. That may sound a little early, but I think that we were heavily influenced by the economy of that day. We were very sensitive to things. For example, take elections. My father with his political activity was always in touch with people like the Republicans. Herbert Hoover sent a note, and Franklin Roosevelt sent a note and so on--more than one--asking him to support.

We met all these other people. Politics in kind of a vague way, on the side, meaning the economy in a nationwide sense. Going up to the mountains, for example, and seeing all this fruit and vegetables in the Valley. The most beautiful stuff you have ever seen. And you could buy a lug of tomatoes for a nickel. And ten cents for a lug of berries or something like that. There was distribution and not, of course, the production.



Swent: Well, by '37 it was--was it turning?

Maslach: Not really. It's rather interesting that you mention that because just the other day there was a television program, and one of the people said something which I totally agree with and believe in. The concept was to get out of the Depression. Well, starting in '29 and we really did not get out of the Depression until '39, when we were already heavily involved with war work or the Great Britain--on the Lend-Lease Program. It was cash on the barrelhead, concepts that Roosevelt had to go with because it was not, in '37, '38, a strong feeling within the United States to get involved over, say, the Spanish Civil War and so on. We were not isolationists, but we were withdrawn definitely. We had our --we wanted to get over this Depression first. Which, of course, was international. It was not until '39, ten years, that--and even then, one can argue, and this is what the man on the television program said, the Depression went right to the war, until '41. Well, I think that in '39 there was already quite a bit of work being done for Great Britain that took the edge off of the Depression.



## II SAN FRANCISCO JUNIOR COLLEGE AND THE UNIVERSITY OF CALIFORNIA, 1937-1942

### San Francisco Junior College, 1937

Maslach: But I went to junior college and one of the things that you should note is that historically we have another big red star for 1937. Nineteen thirty-seven is when President Robert Gordon Sproul established the liaison committee organization, which is many liaison committees, really. But the liaison committee, to articulate with the community colleges and the state colleges. Thirty-seven was when Sproul did it.

Swent: And he was president of the university.

Maslach: President of UC Berkeley. And that was a major change because now you could go to community colleges for two years and if the community college was, quote, "accredited," unquote, by the university's liaison work, why, then you could transfer to UC Berkeley.

Swent: Before that you had not been able to do that?

Maslach: Not easily. And the ruling was very simple, and that is if you were eligible to go to Berkeley from high school, then you could transfer, as long as you had a C average at the community college. But if you had a deficiency, scholastic deficiency that kept you from Berkeley as a freshman, then you had to get a C+ average. My deficiency was, as I told you earlier, the two different languages, one year each. So I went and took French at the community college plus the math, physics--the common lower division, is what we called it--and engineering at that time.

Swent: What was the name of the college?

Maslach: That was San Francisco Junior College at that time. Today, of course, it is San Francisco Community College. It was, again, a

new way to kind of thrust me into the world. They had no campus in '37. They used what was then the UC Berkeley Extension building on Powell Street, just half a block north of Sutter, just on the slopes of Nob Hill. There were classrooms there for the morning sessions. And then in the afternoon we used Galileo High, so I did not in the afternoon move out of high school; I was in the same building!

Of course, you would go from downtown San Francisco to Galileo High by just walking down to Stockton Street, picking up the F car, and that deposited you right in the doorstep of Galileo High.

Swent: What about the students? Were they all full-time students, or were there part-time students?

Maslach: The students that I knew were full-time. I did it in a two-year period, actually two and a half years, because I worked as well part of the time, so I did not do the straight two years in two years.

Swent: So it was possible to go part-time.

Maslach: So there was some part-time. Oh, yes. It was always possible. But, as I said, I met half a dozen or more, maybe ten students, very much like me and doing the same thing, planning to go to Berkeley. Some of them, for example, went with me to Berkeley later and then, in the first semester, I remember, I commuted using the F train from San Francisco, Bay Area Rapid Transit. It took us over here to the Berkeley campus.

There were two train systems, actually. There was the Bay Area Rapid Transit system, plus the SP system. They had the big red cars. These were big, old-fashioned railroad cars, full-size railroad cars. Heavy, big. And they ran up Shattuck Avenue.

Swent: Did they call it Bay Area Rapid Transit at that time?

Maslach: No, it was not BART. It was something else [Key System]. I should not have used that. But basically, as I listen to the discussion that we should have trains on the bridge--[chuckles]

Swent: Talk about deja vu!

Maslach: We used to have trains on the bridge.

Swent: Yes.

Maslach: The upper deck was three lanes of cars each way and then the lower deck was two train tracks and then three lanes or four lanes--four lanes--for trucks. It was an entirely different kind of bridge arrangement in those days.

Swent: Were there--I'm trying to think, comparing now with community colleges. They have so many returning students, lots of older people, even my age, going to community college. Was that something then?

Maslach: Well, in the days when I went, in the thirties, and when John Whinnery, I think I mentioned, also went--he was a graduate of Modesto Community College and became dean here before I was. A very honored man in his profession. He and I, I think, epitomized this movement upward of a people trying to get a leg up in the economy. It should be noted that--

##

Maslach: Engineering has always been known as *the* professional career that has the largest number of people who have moved up from one level to an academic, professional level, as compared to law, medicine, or business, which are the other three major professional areas. Engineering always attracted people who had a background of doing something. For example, one of the common questions always was for electrical engineering students, "Were you a ham radio fan or operator?" You know, they would ask you these questions. "Did you have hobbies?" "Did you make things?" And so on. And that was supposed to be the concept of engineering. You had to use your hands as well as your head. I don't think that's nearly as common today, but in those days it definitely was.

So community colleges I don't think were as organized as they are today. Later on, as I got to know much more about community colleges, I realized that they had an enormous range of function. The first function, of course, is to get people for the two years and award the Associate of Arts degree. With that degree, you transfer. That is one kind of theme of the community colleges.

But when I went around to community colleges, I found that half of the students were at night time, part-time, and also not degree-oriented, and taking courses for very specific subjects and so on. It was not a remedial thing as it was a continuing thing, a need to learn more about a certain area, in part like an extension operation. As one student one time told me, he said, "Like high school with ashtrays." [laughter] I always thought that that connotated the adultness of the whole thing.

Swent: Was there any particular trend towards going into teaching? Was there teacher preparation?

Maslach: No, because in the state of California we have the enormous organization of the state college system. The state colleges--when I was back there in the thirties--they were called teacher's colleges. Their primary purpose was for teacher development, and so San Francisco had a state college off Market Street, on the north side of the street. That was very well known. Pretty good size, incidentally. It was not a small operation. So we had the university, we had the state colleges, and the community colleges.

And Sproul, in his vision, thought that you could articulate transfers all the way through. And this was a wonderful idea. Today I find throughout the world that it is still not recognized and appreciated. I give speeches even today on the California system, which has these three levels, and the secret being that you can move from one level to the other. You take Europe, for example, which I know best. This is so contradictory to their system that it's just very difficult for them to make that kind of a change.

Swent: They don't interlock them there.

Maslach: That's right.

Swent: The way we do here.

Maslach: Yes.

Swent: How about the caliber of their teaching? What about the teachers?

Maslach: Well, the Depression days, the teachers were excellent. Everybody tried harder, I think [chuckles]. They knew they had to hold that job, and to hold that job they had to be good. I remember a teacher that taught some of the basic engineering courses that we still have but not everybody takes was truly a good engineer. And the man that taught surveying, Professor Jacob, he was a famous surveyor and did much of the surveying work for the Golden Gate Bridge, so he would bring examples right from the field. So we really had very good teachers. I must say that I never, never faulted the teachers in my career, never.

I, of course, was in that morning group, going downtown, even though I lived near downtown. I was in the downtown area, a very sophisticated kind of new world, which you lived in all

morning. And you would go down and have coffee at Foster's and so on. You just kind of became part of old San Francisco.

Swent: What were you studying? What courses did you take in community college?

Maslach: The engineering common and lower division is heavy on mathematics, chemistry, physics, and then you must take a certain number of social, humanistic courses. And I had to make up my deficiency in language. And then there were engineering courses like surveying, and there was one in statics--mechanics, basically. And there was a basic course in electrical engineering, AC/DC circuits, which is sort of out of the picture now, different entirely. But the math, chemistry, and physics was the big push.

Swent: Were you beginning to get a sense of where your future was?

Maslach: I have pondered this question many times, and not in just preparation for this interviewing. But at some point, and obviously it was after '37 and it's probably closer to '42, when I graduated from UC Berkeley, and that is that I made a decision that the thing to do was to change your career or activity every ten years. I just set down that as a kind of a general goal. And if you look back on what I did, influenced, of course, by the fact that we had a war and all that, and a cold war, I essentially lived up to that schedule very carefully: nine years here, eleven years there, and so--and so a forty-year career, from graduation from college to roughly '65, there it is: four separate activities. And I know I made that decision before I went to MIT during World War II.

Swent: Of course, a lot of the things didn't even exist at that time.

Maslach: Such as?

Swent: Well, the kinds of engineering.

Maslach: Oh, yes.

Swent: Things that came later weren't even around then.

Maslach: I agree totally on that. Everything has changed so radically, especially in electrical--electronics area.

Swent: Yes.

Maslach: You just can't gauge. You cannot compare the academic work--

Swent: But you had to have the preparation.

Maslach: Well, that's why the heavy--

Swent: The background.

Maslach: Math, physics, chemistry. I mean, you had four semesters of mathematics in five-unit courses. Two of chemistry, five-unit courses. Four of physics in four-unit courses. These were semester units. I mean, that's a heck of a lot of work. And that dominated, basically, your curriculum.

But getting back to the more social things, the living was rather nice and easy in the sense that I was up in the mountains, developing that activity, and then, of course, during the academic year, I would be down at yacht harbor still [chuckles].

Swent: You were living at home.

Maslach: I was living at home while in the community college. I got jobs, not only the summer jobs but, later on, working as a laborer through the union. Barrett and Hilp was the construction company that I worked for.

Swent: And what did you do for them?

Maslach: Well, that wasn't until, oh, '40, '41, so I'll reserve that for later on. But job orientation was a constant thing. You always had someone on the lookout for--I never actually applied for a job anywhere. I never did. I always had the jobs offered to me, and I was very, very fortunate in that regard.

Swent: Let me throw something in. This may be appropriate. I just finished reading a Commonwealth Club speech. I don't go often, but I read their transcripts. This one was about jobs and work. And this man pointed out that we now speak of having a job or somebody will say, "That's my job" or "That's not my job," whereas we used to say "You do a job." He pointed this out as kind of a profound difference that people used to think more in terms of *doing* a job.

Maslach: In other words, performing on the one hand--

Swent: And the whole--

Maslach: --and the other is the concept of "I own this job."

Swent: Responsibility for the whole--in other words, that your job was not only just to--this particular act but also to please the



customers or satisfy the clients or whatever. I thought it was interesting.

Maslach: I think there is something to that. Again, I fall back on my primary observation of the changes in our society being oriented to the--and responsive to--the great increase in population. As I told you, compared to when I was born, we're eleven times larger here in California.

Swent: That's a profound difference.

Maslach: It makes a profound difference. It's hard for me to still remember--I have to force myself to think back. I do have an excellent memory, in technicolor, but I can remember in the Sunset district there were no houses from about 10th Avenue to 48th, 50th, the Great Highway. So you're talking about four miles of a city which is seven miles by seven miles--one whole quadrant of that city was empty. It was sand dunes. And part of the Richmond, on the north side, was that way. Many, many empty lots and so on. We did not have that feeling of being crowded. In fact, to take the streetcar from downtown San Francisco out to Stern Grove to listen to music or opera, that streetcar was going at high speed through truck farm areas and so on. We finally ended up at Stern Grove. Today, Stern Grove--you think of it as just right next door to downtown.

Swent: Yes.

Maslach: So the whole feeling of easy living, not forced living. Forced living only in terms of economics. I mean, twenty-five cents got you into a second-rate motion picture house, fifty cents a good one. Go to Des Alpes up there, Broadway, and you can get a meal: fifty, sixty cents. Dinner. These were the kinds of things you did when you got small amounts of money, but you were not pushed. You were not rushed. So an entirely different kind of living, in my opinion, than it is today. Much more hyperkinetic today, much more interest in improving oneself in many, many different ways.

I must admit I'm part of it because I tell my children, "You cannot rely just on a salary today. You have to have investments." Every one of them, of course, is involved with investments, as well as their regular work and activity. But we didn't even think that way in those days. Who would put money in the stock market after 1929?

I mean, forget it! [laughter] That was the days when you put the money under the mattress and forget the banks, which were failing right and left.

Swent: But home ownership was important.

Maslach: Home ownership was always big. I think that we have to recognize that that period was sort of the peak of the concept which was brought over from Europe. The migration then was from Europe. It was not from Asia. Chinatown was small; Japantown was even smaller. Filipino and other populations were practically non-existent. As I told you, there were no blacks until the war in the state of California.

So kind of a strange thing to recount now because it all sounds as though it's a foreign environment. In many respects, it was foreign, compared to now.

Swent: But all the more reason to document it. It's valuable to remember.

Maslach: Well, I'm spending too much time, maybe, on this concept of the living of that period because, to me, it was a major thing; it really was.

Swent: There has been such a difference.

Maslach: Yes. Well, in '37, going to community college and being a galley slave in the afternoon, doing these things, going to the yacht harbor, sailing and racing, that was my life. And it was a pretty good life [chuckles].

Swent: It sounds wonderful.

Maslach: I went skiing. I picked up skiing starting in '37. I happened to be on a trip up in the mountains. It was a Boy Scout venture. I was given a pair of old skis, one of which was partly split in the heel. I learned to ski and learned to love it, and so I started skiing.

Swent: Where did you ski?

Maslach: Donner Summit, basically. The train would take you up there, and the highway, of course, was there, but it was small, compared to the train. You could get off at Strawberry and other places along the line. Donner was a spot. Norden, I don't think, had a train station. It may have, but I don't remember going there by the train.

Swent: Did they have tows?

Maslach: They did have rope tows, but pretty primitive. Most of it was essentially cross-country skiing, going up the hill and then

coming down on your own. It wasn't until after the war that the big tows started to sprout up. But it was a new introduction to a new phase of living. I must say that I admired it.

Not too much happened, of course, in those days. It was sort of high school continued, as I said, with ashtrays. But '39 I think is sort of a crucial year, not only because of the bridges and also the Fair--and I did go to the Fair often, simply just to wander around. It was sort of like going to Golden Gate Park, only much more sophisticated, with nightclubs and places to eat and so on. In fact, I went to Sally Rand's Nude Ranch.

Swent: Oh, did you?

Maslach: Even though I was not of proper age. I always thought that was a hilarious thing.

Swent: Was that part of the Fair?

Maslach: Oh, yes!

Swent: Nude Ranch.

Maslach: Nude Ranch, right. So anyway, it was exposure to soft porn [chuckles].

Swent: It probably wouldn't seem so shocking today [chuckles].

Maslach: Today it would not be shocking at all.

Swent: I had forgotten about Sally Rand.

Maslach: She was famous for her feathers and feather dance.

Swent: Fan dance.

Maslach: Fan dance. That's what it was, that's right.

Swent: I had forgotten all about that.

Maslach: But it was quite a time. That and, of course, going down to the Blackhawk every once in a while, to Hayes Street and hear the jazz. I lived a pretty good life during that time.

Swent: It sounds wonderful.

Maslach: During that time, I discovered a new library in the Civic Center, which is just a few blocks from our apartment house in San Francisco. We have the Opera House and the Veterans Memorial

building put up. The Veterans Memorial, on its top floor--top two floors, actually--had a museum of modern art. Way back. And in the museum of modern art--and it was open nights till about ten o'clock--there was a library. It was one of the great libraries and, for me, a wonderful library because for the first time I saw--this was '37 to '40, you know--I saw books on art, architecture, even history, you know, because the art was never so narrow as to be limited to just the Impressionists. It showed the historical breadth. In many respects, that's where I picked up art. Even though I had had music for many years, I never had that kind of concept, except going to museums as a kid.

But I would go down there and that library was open on Monday nights, I remember. It may not have been open every night, but certainly it was open Monday nights. And I would go down there and just live in that library. All the books were so valuable, these art books, that they were not on loan. You just had to use them and see them right there. So I would go down there often, right after dinner, and just stay until about ten o'clock.

Of course, the periodical room in the main library. I used to use that a lot. I was a voracious reader. I just read everything I could read. I was never limited. Every time I could see a new area, I would start in and I would read deeply in these different areas. This is one of the things that I did in the period.

Of course, at the same time, we also had our Sea Scouts. My brother and I decided that the Explorer Scouts were just limited, and getting up mountains was a little bit of a chore unless you had transportation--and we didn't--so we got a boat donated to us, and we remodeled the whole thing and made--that period, essentially from age sixteen on through to twenty--

Swent: Wait a second. [interruption] I think it's gone now. It was a trolley.

Maslach: This room is right opposite the--

Swent: That's okay. It was just a cart going by with something on it, I think.

Maslach: Anyway, getting back to living. So many different things to do, you know? It came around to the point where I was now transferring over to the big UC at Berkeley, and it was an entirely different life. I kind of slipped into it by steps.

Swent: Now, this is in 1940?

Maslach: Thirty-nine-and-a-half. The beginning of 1940, January of '40.

Father's Help for Polish Refugees

Swent: Were there intimations of the war by then?

Maslach: Oh, yes, intimations of the war. And the Spanish Civil War, of course, by that time was pretty well over, but the--remember, there were all kinds of invasions other than the Spanish Civil War. We had Abyssinia (Ethiopia today), the Italians, Libya and so on. So there were just all kinds of movements. Of course, the League of Nations and Switzerland was the scene of many, many horrible speeches--Mussolini and others, you know. Of course, Hitler was right up there in 1940.

Swent: I was wondering if you had any sense of--

Maslach: Thirty-nine.

Swent: --refugees coming in?

Maslach: Yes, I was just going to say. The fall of '39 was the invasion of Poland.

Swent: That's right.

Maslach: So that war--

Swent: You must have known about this.

Maslach: Yes, oh, yes. We were heavily involved in that for a while. My father was helping in the refugee program.

Swent: Were there many Polish refugees who came to San Francisco? Or that you were aware of?

Maslach: Well, I remember easily twenty, of that order. One of them--the Lubermirski family--my father was most proud of. It's a couple that he brought here, essentially the royal family of Poland. They were descendants of the last kings of Poland. They were the highest level of society in that time. When my father died many years later, why, he had buried with him the gold cross from Poland, the highest level civilian medal that was given by the Polish government. It was from, of course, the Polish government in exile at that time.

So we were involved in the refugee thing, but it was always sort of a surreptitious thing. It was always cloak and dagger. My father wouldn't say anything and then all of a sudden, someone would appear, you know, who was from Poland. There was this successful arrangement. How they came out, I don't know. I never did question my father on the details of this, but as I said, he was such a big name in the Polish community, Slavic community as well, but he kept pretty quiet on all of that.

Swent: Do you know what this award was for?

Maslach: For his work in getting refugees out of Poland.

Swent: With the refugees.

Maslach: Yes, it was totally for the refugees. So, yes, starting in '39, why--maybe even earlier--we had contact with the refugee problem in Europe.

#### Taking the Cuneo Family to Yosemite

Maslach: In 1940, as I said, I came to Berkeley, and I met Doris again fairly soon after I got here. I was still commuting. She learned about my working up in Yosemite, and she said, "You know, I've never been to Yosemite, and my family has never been to Yosemite." And "Would you take us up and show us Yosemite?"

And I said, "I don't care to go to the Valley." Even in those days, when it was fairly free, I felt that it was too crowded [laughs]. The net result was the summer of '40 I took some time off, and I went up to Yosemite Valley with her father and her sister. Her brother did not come; he was doing something else.

And so the three of them and me just--I was sort of the tour guide. That was the year when I took her and Barbara to the top of Half Dome on a one-day trip.

Swent: Barbara is her sister?

Maslach: Sister. We started early in the morning. I had a small pack with lunch and so on. Unfortunately, they did not have good shoes. They were using saddle shoes, which were rather common in those days for everything. But we got up to the top. Even though the cables were down, flat--the last thousand feet, you have these cables, which are usually at waist height, and you can

just help yourself, guide yourself up to the top. So we would have to pick up the cables when we wanted them. They were half-inch steel.

So we got up there, and we were there for a very short time because I could see a big thunderstorm coming, and the thought of being on those cables, which are nothing else than a thousand-foot lightning rod, you know--so we got out of there and got down below. We talked, of course, with the people who were putting the cables up to waist height. They had stopped working because of the danger, as well.

So anyway, we got back and we had this wonderful trip in the summer of 1940. That's when France fell. It's amazing how long we delayed getting into the war. It wasn't until December 7th of 1941. It was another eighteen months.

Swent: Well, there was a very strong anti-involvement feeling.

Maslach: Oh, yes. The anti-involvement--primarily the Republican branch of the government. Taft, of course, being the biggest name that I can remember, but there was another man equally--

Swent: Lindbergh?

Maslach: Oh, Lindbergh's situation had come about. He was for Germany, yes. So anyway, my internationalism has gone up step by step because I could see--we were in a Depression. I could see that the Depression was worldwide and I could see that we were going to go to war. I knew that from the civics class in '37, and here we are now up to '40 and the war is coming towards us at speed. It was really moving. And we were not part of it, except for Lend-Lease and that sort of stuff, selling war goods to England.

### The University of California, 1940, a Different Level of Education

Maslach: The change from the community college to the real university was very, very obvious to me. You cannot go to a class, which I did in that first year, first six months, in the Hearst Mining Building and not understand the concept of the University, the tradition. In those days, we still had coal stoves in the offices of the professors, and down on the first floor would be this row of coal scuttles the professor would pick up and take to his office. And so this was the thirties, 1940.

And when you saw a professor's office, when the door was open and you looked in there, why, this was all wood panels, oak, with a fireplace. If you look at Hearst Mining over here, why, you see all those chimneys. That's what they are. And the offices of the professor opened onto the rooms where the lectures were given. So you would come in as a student. The doors were closed, and you would wait a while and then this door would open and in walked the professor. So you really had a kind of a British higher education view right there in that building.

Then you would go to a modern building which had just been finished, McLaughlin Hall, and the rooms were entirely different. They were very, very standardized. Small.

Swent: McLaughlin wasn't called--what was it called at that time?

Maslach: It was just called Engineering, the Engineering Building. I still want to point out that I was very impressed right away with not just the teaching level, good teachers which we had in the community college, but there was sort of a patina, a tradition that was on this level which was different. This was the university, and you were a university student.

In those days, we were just kind of running out the end of the tradition which died in World War II of having Engineers Day. Engineers Day was Washington's Birthday; he was the first engineer in our tradition. [On] Engineers Day this campus closed down. You could go to the archives in the main library and take a look at the pictures of what they had. We had an enormous parade--

##

Swent: You were just talking about Engineers Day at the university.

Maslach: Well, they had this day which truly shut down the university. There was this parade. There were floats, there were sporting events, including mud fights--

Swent: I have heard about the mud fights.

Maslach: Well, the mud fight was always down there where now the public health building is, down the lower end of the campus, below agriculture. Well, what they would do is just flood that field down there with fire hoses. Then they would have tug-of-wars, which was the most common thing. There would be teams from different classes or parts of the university. It was essentially like a big county fair, you know, with all kinds of things going on. In those days, of course, the engineers were known as beer



drinkers. There was always beer around [chuckles]. This was a campus--there was no drinking. Alcohol-free. But there were all kinds of places to hide these parties.

Hearst Mining--it was the mining students who would be the epitome of the engineering student, the big raw-boned guys and so on, you know. We had all these cartoons by Rube Goldberg, who was a student here [chuckles]. His cartoons were in the Student Union. In fact, I remember not just the cartoons but there was a statue that he had carved. Rube Goldberg was big in those days.

Swent: He was much earlier, though.

Maslach: Oh, he was earlier as a student. But my point was that his tradition lived on with his cartoons and so on.

But you soon realized that you were not dealing with school teachers; you were dealing with professors. They became a big difference. One of the first courses I took was a thermodynamics course; then, in those days, 105A, the first course in the junior year. I had had a thermodynamics course over in community college, which was not a rigorous course but fairly good. And so when the first midterm was given early on, he wanted to sort of judge the class. He gave a quiz. It was mostly physics, mathematics and some thermodynamics. I think it was about the second or third week of class. Well, I finished the thing in half an hour, and I'm sitting there. I was up in front. I reviewed everything and checked everything. Finally I just got tired. I got up and walked. So he looked at me and pointed to the chair, so I sat down [chuckles] again. He went through my exam and just graded it. Put "100" on the top and handed it back to me.

Swent: Before the exam period was even over!

Maslach: Over. And so he says, "Come to my office hour." I didn't know what the heck this meant. Here I am, brand new, no friends in this big campus--or a few that came with me from community college, but, you know--so the next day I went to his office hour. He said, "Where did you take thermodynamics?"

I said, "I came from the community college and we had this course," and I described the course.

He said, "What was the text?" I pointed right behind his head, the book [chuckles] on his shelf. I said, "Right there."

He turned around, "Oh, yes." He went through it and so on and just told me he'd give me a pass or whatever it was. I don't

even remember. And to go take 105B. Right away, I got a pass on 105A. I shouldn't have taken the pass. I should have stayed with the course because some basic thermodynamics is not my strongest field. I felt that I could have learned something, but I would have had to go through a lot of boring sessions. But anyway, I skipped 105A and went on to 105B.

### A Combined Mechanics Course with Professor DeGarmo

Maslach: The other thing I was taking that first semester was a six-unit course--five units, really, I think--but it combined two courses. Mechanics is divided into statics and dynamics. So these two courses, the junior year first semester and second semester, have a combined course. They also have a combined course in 105A and B, but they didn't allow people to take those two combined courses at one time. It was just too heavy a load.

I was taking this combined course in what was then 102A-B. The professor was a man by the name of E. Paul DeGarmo, industrial engineering.

Swent: DeGarmo?

Maslach: D-e --that's a famous Irish name--G-a-r-m-o. He taught more like a schoolteacher than a professor [chuckles]. He assigned problems to be put on the board and stuff like that. This was a wonderful class. Again, an introduction to the university. Because I then learned about sports in the university because I came into the class. I used to sit on the side and lean against the side wall--you know, slouch. And one day this great big guy came up to me, and he said, "Do you mind if I sit there?" I said, "No, no." He sat down. It was Bob Reinhard, who was a famous football star. Went on to pro football, with a great career in pro football. And another student, who was the opposing tackle on the other side of the line--Bob Herrero--was also in the class. So here we had an engineering class with two top athletes. They used to just go to sleep because they were so tired from practicing and so on. They were full-time students, and this was not an easy major. And so I used to sit right next to Reinhard.

One day DeGarmo came into the class and there were some people behind me who were talking, and they continued talking while he tried to start the class. He had this volatile temper. He just--sort of a black Irishman. He just said something like, "YOU!" He pointed. "PUT THAT PROBLEM ON THE BOARD!" I realized

he was pointing at me! I looked around. No one else was getting up. And so I'm a feisty person, or was even in those days. I just went up--I took my book and I just went up to the board.

He says, "You can use your paper."

I said, "I can do this problem with just the book." I made some sarcastic, slurring tone in my voice [chuckles]. He glared at me. And I went up and I put the problem on the board. It was a very simple problem, really. And I sat down. That was kind of a first contact with him. Sort of jumping ahead a little, there was always a continual contact, but looking ahead, he was a professor here when I became dean many years later [chuckles]. It's sort of odd to have that concept many years later. But he liked me in his gruff way, and I got an A in the course. No problems.

The next semester I was sitting with a bunch of guys on the engineering courtyard, which is bounded by the engineering building, now McLaughlin Hall, and [what] was the mechanics building; the yellow brick building has been destroyed and was essentially where the Bechtel Student Center is now in part and in part where the civil engineering building is, Davis Hall. So I'm sitting there with a couple of guys, talking. DeGarmo comes out of the building, and he has some young woman next to him, and I looked around. He sees me and he barks in his usual style, "MASLACH!" I didn't have a class. What does he want me for? He introduced me to this young woman, who had had a very disastrous first midterm in his class, statics and dynamics. And he said, "She needs some help. Why don't you tutor her?" And he just walks away.

#### A Successful Stint as a Tutor

Maslach: So here I am [chuckles] with this young woman, who came from Pebble Beach. I mention this especially because there were practically no women in engineering. And here there is a rather attractive young woman, very well dressed. I always remember her clothes--I mean, like, wool skirts and cashmere sweaters and stuff, you know [chuckles]. I said, "What's the problem?" And so she gave me this midterm, which shows an F. I looked at the thing, and I said, "Oh, Thursday is my day off." She didn't have classes, either. We either had Tuesday, Thursday, hour-and-a-half classes or Monday, Wednesday for one-hour classes. So I said, "Okay." This was Wednesday. "What time can we get together? Where should we get together?"

We wanted a quiet place, like you and I want a quiet place [chuckles], and we ended up in using the mechanics building laboratories. They had tables for the afternoon experiments, and if some experiment isn't being used, why, there's a table empty with chairs and so on, so we'd be in the laboratory there. The library--you couldn't talk, so you couldn't go to the library. So for the rest of that semester I tutored her.

Swent: What was her name?

Maslach: I can't remember. I really can't. Betty. Yes, Betty, Betty. She was in engineering because her father had been an engineer, and then a lawyer, a patent attorney. Very wealthy. Lived in Pebble Beach. And he vowed to have one of his children to be an engineer. He only had one child, who was a daughter, and so he forced her into engineering. She was a good science/math student so, you know, in those days I guess it made sense, but not really. Anyway, she finished in engineering. But she had some boyfriend back in Pebble Beach area, so it was never anything romantic.

Tutoring didn't take much time or anything. I learned very quickly--I guess this was my first experience with teaching. I learned very quickly that her problem was not understanding the material. She showed me problem sets and other stuff, and she understood the material. That was not the problem. The problem was she did not know how to take a test, and this is a problem that is common even now with very many, many students. Even when I was teaching, in the beginning, in the early fifties, I remember students that were just petrified of tests. Perspiration was pouring off of them. People were just shivering and so on. So it was a real problem you have to try to get around, so there are different ways of testing.

One day we were there in the mechanics building, and I said, "I'm going to give you a pop quiz." I said, "Do problem so-and-so." Out of the book, you know. She takes a piece of paper and then she starts right away. I grabbed the pencil out of her hand. "Read"--"RTP, RTP!" She "What?" "Read the Problem." So I shoved the book at her and made her read it and re-read it. She had a general idea. Do you think this is a problem you kind of know how to do? What approach are you going to use? And so on.

I remember this solid geometry class, where I took Doris's paper in high school. The teacher there said once that if you're taking a test that if you have five minutes to do a problem, spend two minutes to three minutes reading the problem and analyzing the problem, and then do it. I kind of gave her the

same lecture, and maybe even used his words in this whole thing. But she simply would go rushing into the problems. So I gave her a course on how to take a test, basically. And I went back to the original F midterm, and I said, "Okay, let's take these pages and let's start in there. What do you do?"

"Read the problems."

"You read them all?"

And you jotted down on the edges, maybe, some notes on what to do. But you read all of them. And then you did the problem that you knew you could do easily and then the next one and the next one, leaving the toughest problems for the end. And so I think I spent maybe half a dozen weeks there, four or five weeks, just teaching how to take a test. And I remember that she had an exam on a Monday, another midterm, same class. And so we got together, oh, I don't know when, Thursday we did, I know. She asked me to go over the course for her. I said, "Sure." So I did. At the end, I wrote out some problems, gave it to her, said, "Okay, here's your exam." [chuckles]

I went through the material in the sense of what were the fundamentals in each section. How many fundamentals are there? What kind of problems do these fundamentals apply to? You know, just kind of stripped the course to the bare bones. So she knew what I meant, and she read the problems, jotted down, and took the quiz which I made up, and she did very well. The upshot was the next Wednesday, when she got her quiz back she came flying out of the engineering building, holding up the paper and showing it to me.

I was standing there with a bunch of my friends, all of us had taken the course, so we were all talking to each other and looking at this test, how well she had done. She got an A. On the top, DeGarmo had written, "Nice recovery." [laughs] So that was my first teaching experience [chuckles]. She went on for the rest of the term. We met once a week for an hour or two and just went over the material. She was really an interesting young woman. Very quiet. She I think had a dominating father who pushed her into engineering and so on. She eventually married. I met the guy, I think, on a football day or something like that. But he was older than she was. He had been sort of a high school football hero and everything else, and he went on to law. He was years ahead of her, but she knew him because they both belonged to the country club down there, Pebble Beach, so they saw each other all the time. I often wonder whatever happened to her engineering career.

Swent: You do wonder.

Maslach: She was a very, very interesting person. Always perfectly groomed. Hair was just well done, you know, and clothes were obviously not made to order but high quality clothing. She stood out in this group.

Swent: It must have been very gratifying to you.

Maslach: Well, I mention it at length mainly because I think in my thinking about teaching and so on and university career as professor, that was my first experience.

What has happened from then on was that I became acquainted with professors and courses. Ray Martinelli was a wonderful professor of thermodynamics and heat transfer. He died following World War II from leukemia, a problem which obviously could be traced to the fact that he was doing--with his friend Earl Morrin, also an excellent heat transfer man--they were doing research on molten metal and heat transfer. Beryllium was the material, and today it is known to be horribly toxic, so there's all kinds of evidence, pointing back to both of these people dying of leukemia and so on.

#### Laboratory Assistant to Professor Richard Folsom

Maslach: But also a professor of fluid mechanics and heat transfer--well, fluid mechanics primarily--Dick Folsom. He seemed to gravitate towards me and I towards him. We seemed to have common backgrounds in a variety of ways. He came from Caltech [California Institute of Technology], where he had his Ph.D. He was an All-American for that level of football, not the top schools like USC and Berkeley but for the smaller schools, such as Caltech. He was a lineman in football. He was one of my professors, and we got to know each other. He had a liking for the Sierras and stuff like that.

Anyway, he asked me to do some laboratory research assistant work in my senior year. This was my first touch with research and my first contact with the war because the research was on a landing craft which was designed by Roebling, the famous Roebling Company that makes steel cables. Mr. Roebling had designed this craft, which was like a large bathtub, and then it had a set of what are called grousers, on a belt. And so essentially it was like a tank, but instead of just the flat tank pads, there would be, like, Pelton water wheel scoops that would catch the water

and move the craft forward. It was a rather elementary device. You saw pictures of them doing landings in Normandy and stuff like that, but there were other kinds of craft developed later on which were more seaworthy, better.

But in 1941, why, I remember spending a good part of Christmas Day and the day after and so on testing this at the towing tank, which was at the College Avenue Pool. The basis of the reason for the pool is that that was the ruins of the Hearst Gymnasium for Women; this big wood structure had burned down, and the pool was still there, so we used it for experiments in fluid mechanics, pumping equipment, and stuff like that. It is no longer there. In fact, where it was is where the architecture/city and regional planning building is. College of Environmental Design. [Wurster Hall]

But anyway, I started working as a research assistant, as a senior. That's a little unusual. So I just kept going, and the next thing you know, Mike O'Brien, who later became dean and was also one of my professors, had me carrying out research experiments on pump development, deep well pumps for pumping water out of the water table up to the surface and were very popular. The Pomona Pump Company was the big manufacturer at that time.

Of course, our water level went from something like ten, twenty feet to a hundred and twenty feet. We are not nearly as rich with subsurface water as we used to be.

### Three Influential Women: Nauta, Lane, and Woertendyke

Swent: Were you paid for this?

Maslach: Oh, yes. It's one of the things I wanted to point out and that was that I remember getting my first paycheck. It was given to me at the mechanical engineering office, which was then on the first floor of the engineering building. I walked into the building, walked into the office, and there were three women there, maybe not standing by themselves at the time, but the three women I met played major roles within the college.

The first one was Mrs. Nauta. I think that she was the senior. And then there were two other women. The next one was Violetta Lane, who later became the head of our undergraduate office and is the person that most undergraduate students of the thirties, forties, fifties, sixties remember because she was

truly the spiritual guiding person in engineering. She was the mother figure. She really was. I remember when she retired, and I gave a speech at her retirement. I just said that she was the spirit of engineering. All these old students came. One person I remember in the Alumni Association: "Is Miss Lane still there?" She's still living out at Rossmoor. Wonderful, wonderful person.

And the third one was Frances Woertendyke, who later became assistant to Dean Mike O'Brien and stayed on and was one of the major persons in the dean's office for many, many years. She died--

Swent: She died just before our first interview.

Maslach: That's right, just a couple of months ago--

Swent: You mentioned it back then.

Maslach: --she died. Very sad to hear. You know, a person calling up and telling all this--

She later became Frances Eberhart. She married Harold Eberhart of civil engineering, and they moved upon retirement down in the Santa Barbara area. But I remember receiving that first paycheck. It was kind of nice. I had started summer work during this period, working for Barrett and Hilp, as I said, and when you're pouring concrete, you're making a dollar an hour. As research assistant, I was making seventy-five cents an hour [chuckles] the next year. But, of course, it was a different kind of work. It was academic and there was much more to it.

Swent: Were these federal, government grants?

Maslach: This was a government grant or a contract, really. This was rare at that time and was new. But you have to remember that the Radiation Laboratory was already in full swing, and the Radiation Laboratory was located right here on the campus, where the chemical engineering building, the new one, is located today [Tan Hall]. So there were grants of a certain nature. There was research work in metallurgy and materials, I know, and there was this one.

Swent: I think one of the things we might want to talk about is how the whole business of grants, research grants, changed.

Maslach: Oh, yes. That's a big part of my life [laughs].

Swent: There were probably a lot fewer then.



Maslach: Oh, very few. The fundamental agency was not set up at that time. It was set up maybe a year later, '41. That was the National Defense Research Council.

Swent: I wonder where the initiative came from.

Maslach: The National Defense Research Council?

Swent: I mean, would they come to the university and offer a grant, for example? Or were professors chasing grants?

Maslach: It worked both ways in the early days. The war days--and this was the beginning, you know. The war had not been started as far as we were concerned, so people in the industries and/or the government would make monies available. In those days, they were grants in aid, and they had a very, very low overhead; in fact, probably zero. It was to support the students and the professor and so on. Overhead was unheard of in those days.

Swent: You didn't think about that.

##

Maslach: Well, it was quite a period of my life where things were kind of jumping. I was dating Doris here on the campus and meeting with her family. My brother was drafted early on and went in, became a paratrooper. So my sister married--that was some time earlier. I told you I was in the wedding party, complete with tuxedo [chuckles] and so on.

Swent: You hadn't mentioned that. I think we looked at a picture.

Maslach: The reason I mention it--I have a picture at home, I know, of the whole wedding party--but the reason I mention it is that, as I said earlier, I was thrust into--we all were thrust into an adult relationship. We became older faster because of the Depression and then the war. I constantly repeat myself on this. I might have already said it, but think through in big terms. You're born in 1920. And nine years old, you had a big Depression. You know, every once in a while you're hungry. There's no food. I mean, there were real problems. You walked down the street, and people--the men selling the apples. That was right; that was true; that was happening all over.

And so to see this Depression, when you're nine, ten years old--and then downtown San Francisco the major labor movement and so on. And then in '39 there's a war in Europe, ten years later. This is your whole period of nine to nineteen. And guess what?

It's dominated by poverty, frugality and war. And then all of a sudden you're drafted.

Professors Larry Marshall and L. M. K. Boelter

Maslach: In my case, it didn't turn out quite that way because one day a professor here in Berkeley, electrical engineering, by the name of Larry Marshall--he was one of the new breed of professors, younger and not so organized with power electrical engineering, which was essentially what electrical engineering did. Electronics had not really advanced that well. And he came to me one day--in fact, we kind of bumped into each other. I had just finished measuring impellers on pumps that I was testing over in the lab, and I had a couple of these impellers, and he saw me. You know, he knew me. I had taken a course from him.

He said, "You're graduating this year."

I said, "Yes." I looked at him, [chuckles], wondering what he was going to say and why he stopped me, this whole thing. And he gave me a very brief accounting of this laboratory at MIT, radiation laboratory. But we had a Radiation Laboratory right on campus, so I thought immediately, you know, it's another atomic radiation laboratory. I said, "Well, we've got radiation here."

He said, "No, no. This is entirely different."

Then he said that they were recruiting people and so on, and "they need people, mechanical engineers. It's mostly electrical and physics, but they need mechanical engineers. Would you be interested?"

I said, "Well, let me think about it," you know. Here I am, just this kid [chuckles], you know. I had been working as a laborer during the summer or I'm up in the mountains, working as a packer, and, you know, I couldn't believe that these things were happening to me. I didn't think of it in those bigger terms. I was just not sophisticated enough to understand what was happening to me.

My advisor was L.M.K. Boelter, Lewellyn K. Boelter, who later became dean of UCLA [University of California at Los Angeles] engineering when they started it. He was the first dean. So he was my advisor. We had kind of developed a good relationship because I had taken a couple of classes with him, including heat transfer. He was one of the top authorities. He

and a professor at MIT were the two heat transfer experts. They each had a different approach to heat transfer. There's two schools of thought, and he was the one on this coast. He developed Martinelli, Morrin, Seban, Johnson, and Drake and all those people, the big names in the field of heat transfer.

Now, of course, we have added Chang-Lin Tien, but we imported him, our former chancellor. He was a student of Robert Drake at Princeton, and Robert Drake came from Berkeley.

Swent: Going around.

Maslach: All in the mold. Yes, what goes around, comes around, for sure. So anyway, I was thinking, "Gee, I've got an offer for a job." I was thinking, "Well, I haven't thought about a job" because I felt that I would be drafted, just like anybody else. You have to remember we went through some horrendous periods here because following Pearl Harbor, the Japanese were sent to internment camps, remember?

Swent: Yes.

Maslach: I remember going down there, oh, about where the stadium is located, the track stadium is located, down below the Harmon Gym. That's where the buses took the Japanese from Berkeley. There were student friends of mine there, and there were families that I knew that were taken there. I went down purposely and I looked at it. So my internationalism had grown by leaps and bounds during this period, and the war was getting closer and closer to me.

As I said, I had this job offer, and then there was another vague job offer I got through my research work with O'Brien and Folsom. It never really developed very concretely, but Larry Marshall was pushing me. So I would ask Boelter, "What should I do? What do you think?" And Boelter told me--Boelter was considered a great philosopher--Boelter told me that I should go to MIT. This would be a wartime experience that I would never see again. In fact, it would be an experience, engineering experience, because they were well funded; it was a major program. He knew basically what it was, but he didn't tell me. And he said, "This is a wonderful next step."

What he talked about, which always stayed with me, was sort of a lecture. When you take your first job out of college, what is important is not what you do or the company you work for, how much money you make and so on. What is important is who are you going to be working for? Who will be supervising you? That first job is an extension of your college work, and so the person

you're going to be working for and the kind of work you're going to be doing is all-important. Forget the money aspect of it.

He kind of wrapped me up with this philosophic cloak of going to MIT and doing this work, which I didn't know what it was. I didn't know until I got there. So I went to see Larry Marshall again. He said, "Have you made up your mind?"

And so I said, "Okay, yes, I'll take it. Tell me what I should do."

He said, "I'll get a form" and so on. I had agreed to do that job. I told Doris the next time I saw her, because we by that time had already indicated our intention to get married. So things were moving pretty fast [chuckles].

They were moving pretty fast for everybody. You know, the people you see and hear today and then next week, you know, they're gone. Not internment camps but usually in terms of being drafted, taking jobs somewhere or getting married quickly and so on. It was sort of a really hectic time. I was working as a research assistant, putting in a lot of hours. I told you that one of--that landing craft job, why, we were working nights until midnight, day after day after day.

Swent: What were you doing, designing?

Maslach: Well, no, the tow testing was to--we were using the tow tank to see what the resistance, water resistance, and also the efficiency of various kinds of impellers to be used to drive that device. Of course, the great, great impeller for a water wheel is the Pelton water wheel. It came out during the Gold Rush days. So we had a lot of knowledge of that type of impeller, and that's essentially what we ended up using. It's one of the most efficient sources for that kind of a job.

We were doing all kinds of things of that nature. We had gone past Christmas and, of course, we were now in the war. I filled out the form for Larry Marshall and then I was given some material, if I received a draft notice. I was to give that material to my draft board. It always was sealed, incidentally [chuckles], the envelope from MIT.

Swent: What about ROTC? Had that ever been--

Maslach: ROTC was in high school and in the university, but I did not take it in high school. It was optional. And I did not take it in college because they did not have it in community college, and

when I came here it's only the first two years. So therefore I was--

Swent: Really skipped that, yes.

Maslach: --never in the community college at all--I mean, in the ROTC at all. So I was really kind of floating. I want to give you this impression. Everything was moving. In late April I was told by the university, by my advisor, Boelter, that I could go to MIT.

Swent: April of '42, right?

Maslach: Yes, April of '42. I could go to MIT and skip all my finals for that last semester. They would just give me a grade. This was one of the things that was going on that led to--as I said, all of this movement. All of a sudden, people were gone. Eventually--I was the first to go to MIT from Berkeley, but eventually from Berkeley came Ernie Martinelli, Ray's brother, and Bob Grenzbach and Hank (Henry) Brockschmidt--Grenzbach was best man at my wedding. And there was Johnny Butler. Pete Tilton--his father was city regional planner in San Francisco.

There were lots of them. Art Hughes was another one. So Marshall did a good job of recruiting here, okay? Most of those --or quite a few of those, I should say, are mechanical engineers. Ernie went on to a Ph.D. in physics here at Berkeley and Rand Corporation and big research in the cold war period. But all of a sudden, I was told to report to MIT. I said goodbye to Boelter [chuckles], Folsom, you know. I got a job; I got to go. And I had this check, got the tickets on the train, and say goodbye to Doris [chuckles]. It was really pretty hectic.

I remember my mother, Doris's mother and father, and Doris--the train--in those days, you took the ferry and then you went from the ferry over to Oakland and then you took the train in Oakland. You went on this long ride. I must admit it was--

Swent: It must have been several days.

Maslach: Oh, it was about three or four days, and I was on my way. A whole future in front of me. And I knew very little about what I was going to do or where I was going to go, and I was headed for Boston. That was it. It's hard to describe now, but--

Swent: Blackouts?

Maslach: Oh, yes, blackouts in San Francisco, Boston, everywhere. But the whole thing was, everything was moving. You didn't think twice about a lot of these things. You just did things, almost like

instinct told you this was the proper thing to do. I made that decision on my first job, and that was one of the greatest decisions I have ever made.

### III MIT RADIATION LABORATORY, 1942-1945

#### Getting Oriented as Number 504

Maslach: Arrived in Boston with another recruit, Al[len] Hoffmann. We roomed for a while in Boston. We got there, and the Rad Lab was open five and a half days a week. It was actually open twenty-four hours a day, every day, seven days a week. But we got there on Friday, and Saturday morning we presented ourselves at the lab. Everything was high security. The entire MIT area where this lab was, two or three buildings, including part of the main building, was patrolled by armed troops.

And so the first thing you did was you walked and--oops! And then you said where you were going and you identified yourself, etc., etc., and then you went to another stop point, and then they had your name or didn't have your name. And that's as far as you got. If they had your name, why, you were in. You were then taken into a personnel department meeting and representatives, one by one.

Everybody was called--college graduates--were called staff. There was no hierarchy of full professor and so on. You were all staff members. I was 504. They eventually went up to five thousand. So I was sort of in at the end of the first floor. The thing was wide open. Offices were nonexistent for most of us. Had tables out in the hallways and desks were pieces of junk [chuckles]. File cabinets--you didn't see them, you know.

Everything was under strict security measures. Of course, the first thing they did was take your picture and issue you a badge and a card, an identification card. You had to have one or the other. If you came without a badge, why, you were stopped and you had to show your card and then they would check you. They would describe you and everything over the phone. And then they gave you a temporary badge, you know, for the day.

It was a very heavily security-oriented, regimented operation. It had started about a year and a half earlier, about 1940. It was basically the lab that was the major development for radar. I gave you that book.

Swent: Yes, I enjoyed it.<sup>1</sup>

Maslach: It's amazing what we saw. Kind of jumping ahead, at the end of the war, why, we learned that we had the highest funding of all the NDRC programs. The three big programs of NDRC were the radar program of the Radiation Lab at MIT; the Manhattan Project, which was the atomic bomb; and then the third one was the proximity fuse, which was attached to anti-aircraft--what do you call them? [chuckles]--shells that were shot up, and then they used proximity-type things for determining when to explode the anti-aircraft shell.

Swent: Where was that research?

Maslach: That was down in the Washington, D.C., area.

Swent: It wasn't here.

Maslach: No, it wasn't here. So those are three--but they had many, many other projects, including the next one being underwater sounds. That was at Harvard. This was sonar, submarine detection. But they had a whole bunch of smaller ones as well.

Swent: What was the distinction between the Rad Lab there and the Rad Lab here? Same name, but--

Maslach: The distinction was that the radiation at Berkeley was atomic radiation, whereas the radiation we were talking about there was radiation that you have which is the extension of sound. With frequency--there's a whole spectrum of frequency which visible light, sound and so on are a part of. And then when you get way out here--to give you an idea, the wavelength is, like, one millimeter, ten millimeters, three centimeters, one centimeter.

And the radar development that we started--and MIT at the beginning, when I first got there, it was ten-centimeter wavelength. That's about four inches per complete wave cycle. That's the energy going out in that cycle form. Then they went to three-centimeter radar, which was the main radar that was developed for the largest number. And then they went to one-

---

<sup>1</sup>Five Years at the Radiation Laboratory, 1991 IEEE MTT-S International Microwave Symposium.



centimeter radar, and there was a lot of interest in that book because that one-centimeter stuff after the war was much more useful for detection devices for atomic physics.

So we were sending radiation out from a radar antenna, which is a--there might be some right around this roof here--you've seen the parabolic antennas. That's the radiation; it's being transmitted from that--today, they transmit with dishes, three feet or so in diameter and sometimes larger, to satellites which are synchronously rotating with the earth. In other words, there are satellites right above us up here, a whole bunch of them. That frequency is then retransmitted back to us. This is dish satellite technology for television.

Swent: Which all started at MIT.

Maslach: Everything started at MIT. The major part of the electronic revolution came out of MIT, with the twenty-seven volumes that they published at the end of the laboratory under the editorship of George Valley, a man mentioned in that book that I gave you. And all the electronic devices that were developed had immediate value in television and all kinds of transmission. Radar transmission--I should say microwave transmission--today is the way that telephone calls come to you. And so there's just an enormous revolution that occurred. I don't want to neglect the revolution that occurred from the atomic bomb development project, but in terms of direct public-private use of the individual, the work there, at the Rad Lab, was far more useful.

And we had adjunct laboratories. For example, Charlie Townes was down there at Columbia, and he got the Nobel Prize in physics. What did he get it for? Well, everybody remembers he got it for the laser development because lasers are common to us today. The first thing he developed was the maser, which was microwave amplification, okay?

Swent: Yes.

Maslach: Whereas laser is light amplification. So you're in a different part of the spectrum. Microwave was essentially a radar-type application. Getting the most energy out and receiving a very small amount back. An enormous difference. You're talking ten to the fifteenth, sixteenth ( $10^{15}$ ,  $10^{16}$ ) difference between the energy level here and what you get back. That's ten multiplied fifteen times. I don't know what that is. A nano is probably up around twelve or so, and I've forgotten the name of the next one.

But it was just an enormous time of my life. Here's this raw kid, you know, working in a laboratory with some pumps and something. Doesn't even finish college formally, with a ceremony, and there he is, in the big city of Boston. It's all new. It's all just exciting. You're on your own. I always remember this because I think in terms of my children going to college, which was sort of the same thing. Christina went to Radcliffe, and Jamie went to Harvard. At a younger age, they had much the same experience, acclimating, developing your life, finding a place to live, starting a bank account, learning how to do your laundry [chuckles], cooking, eating food or other people are preparing food, and so on. All these things changed and changed so fast in this whole regard.

I just couldn't believe what was happening to me. I guess everything I had learned to that point stood me in good stead because I was never, never intimidated by any of this. I never was overwhelmed by anything. I just got into it. I just did it naturally, just normally. This was my life.

#### "The Biggest Block Party You Ever Saw" in Hamtramck

Maslach: A couple of things happened, one of them rather humorous, on the way. For example, I have family--my father's family predominantly--in the Chicago area. So my family told people there that I was going to come on the train and be in Chicago.

Swent: You had to change trains.

Maslach: Yes. I arrived in the morning, and I took a train out in the evening. Al Hoffmann was with me. So we got in there. I was met by a man who was related to me in a distant way, who worked for a steel company. He was a machinist, operating a big milling machine, trimming various large I-beams and so on. He rode on this machine sixty feet long. He rode with the tool back and forth [chuckles]. He later became vice president of that steel company. He was a very, very sophisticated, modern man. And his wife was just the same. Very Polish.

I was taken in a car from downtown Chicago train station to Hamtramck, which is the Polish community on the border of Chicago. It's right next to Cicero. So you're right in a Mafia-dominated type of downtown, of a small town. So Johnny drove me up to the house. The aunt. I'm trying to remember it to describe the house to you perfectly. All the houses were brick. This house that they owned was, oh, five or six houses removed

from the cathedral. And it was the biggest brick cathedral you ever saw. Poles, 99.9 percent Catholic. And this was a Catholic community. When you got out of that car, all you heard was Polish. Little kids, the big kids, everybody. It was Polish.

I was pushed back from going to work on radar to a Polish community which was really back in the twenties, thirties. I came into the house with Johnny and his wife, and all of a sudden, his wife disappeared. Johnny and I were there, and I am meeting all the men. All the men were there. And only men. I remember hearing about my aunt [chuckles]. Here I am, in this front room of this house. Very nice, very old fashioned. Fireplace, mantelpiece. And over at the side a table just filled with bottles of liquor. Immediately pouring straight shots, straight shots of bourbon, good bourbon. But they toasted your father, toasted your mother, toasted this--

I swear, in ten minutes I--I was just sipping a little, but, I mean, I was drinking--you couldn't believe how much we drank. They drank, especially. WHSSHT! Bottoms up. This was all my relatives and their friends, male. And all of a sudden, something was said, and guess what. In come the women, who were all back in the kitchen. The dining room had been screened off with draw curtains. There was a living room and a dining room and back there was this kitchen.

So I met my aunt the first time, and I met somebody else, cousins and what have you. It was just real old family, you know?

Swent: They were all so thrilled to see you?

Maslach: Oh, I was the first person in the family who had graduated from a university. My brother did not graduate and didn't get his law degree until later, and my sister didn't graduate. She got married before she graduated. I was the graduate of the university. And this, you know--we had this fantastic meal. The food! The neighbors came in! The bishop came in! Everybody! It was the biggest block party [chuckles] you ever saw.

Swent: How exciting!

Maslach: Anyway, I was driven back to the other station, where I took another train.

##

Swent: So after this incredible day in Chicago, you had to get on the train again, back to the real world.

Maslach: I got on the train again, and I must say that I--all I can remember was food, hard liquor, and wine. It was just a drinking party in many respects, of a type that I had never seen before in my life. I had seen people up in North Beach and the opening of the Fair in 1939, which I thought was a pretty good binge, and I have had relations with people who were alcoholics and so on, but never, never had I had that kind of a party, with just dozens of people coming in and out and so on. So it was a great, great party.

I went on, and the train had a wonderful itinerary. I don't know who set it up. We got the tickets, and we got to Troy, New York, and we changed trains again to a smaller train company that went through the beautiful Berkshire countryside, because our ticket read not Boston but Cambridge, so we ended up eventually at Porterhouse Square station, famous for the Porterhouse steak restaurant there [chuckles], and we were in Cambridge, not in Boston, which was a strange way in many respects. Obviously, a ticket was made up by somebody on the Pacific Coast who did not know that MIT was actually closer to North Station or South Station in Boston than it was to Porterhouse Square station [chuckles], even though Porterhouse Square was in Cambridge.

On the way, we had a most interesting time. I saw New England; I saw essentially the East Coast for the first time in my life, of course. The first reactions--this is May--was my God, how green everything is! The green was overwhelming. You know, you come from Chicago. You go through the historic Erie Canal area all the way over to Troy and that area, upper New York. And there is a lot of greenery there. And then here you are, in this absolutely fabulous Berkshire territory. You're coming down these old Indian trails basically, you know. It's just the Mohawk Trail line coming into Cambridge. And it moved quite slowly. And it had only about three or four cars, and it had sort of a semi-club car, where we had breakfast and so on.

There was a man there, an older man. I'm talking fifties, maybe early sixties even. He was obviously a well-to-do person. It turned out he was a banker. So I sat down with him for some time, he and Al and I. Al wasn't as interested in other people as I was. I remember just talking with this man. He said that this migration from the West Coast to the East Coast doesn't work, that the people that come from California in his business, they never stayed in the East Coast. They always want to get back to California.

And so he said, "What you should do is make the most of this." You know, learn and move up in your profession. I couldn't tell him anything, of course, because we were sworn to

secrecy. He just kind of gave me a cultural lesson on what was happening to me and where I was going. Boston. He talked a lot about Boston, Boston society and this and that, and the culture, you know, New England. He got into quite a few things, including the Irish, which was the dominant population in Boston, and the Italian a bit, but mostly the Irish he talked about because the Irish politicians were best known at that time.

I always remember this man with a great feeling of--he introduced me in a kind of a strange way. You know, he was one more person in the line who gave me hints and directions and so on and pointed out that I would return to California. "Everybody does. We can't keep them."

So we arrived at Porterhouse station at night. Took a cab down to MIT. Got off at the graduate house, which was for graduate students but had been pre-empted by everybody and anybody so that you could get lodging there on short notice, especially for projects like the Rad Lab. So I went in and showed him my letter and "Oh, yes, we have room." So Al and I had a room [chuckles]. Midnight. And next day, of course, we got sworn into the MIT Rad Lab.

But the touching note that I wanted to put here is that, yes, I was the first kid, you know, to graduate in the family, but I hadn't graduated. I remember being in Chicago and they said the first person who graduated. I said, "Graduation is next month. I haven't graduated."

Swent: But you knew you would.

Maslach: But I was told that I would and so on, but I didn't know it was going to happen. There's another big unknown in this thing. Well, for about, oh, two or three months later, my mother mailed to me my diploma, which had been mailed to her. Years later, I found out this was one of the greatest disappointments my mother ever had. Of all the people, here I was, I graduated. She never went to the commencement.

Swent: Couldn't go to see you.

Maslach: I was the only chance, and she didn't--until the day she died, I think that was--she said it often, not just once or twice, maybe half a dozen times. That was a big disappointment. I never graduated in a sense. I never got a diploma handed to me. And years later, as dean, I was handing out diplomas [chuckles], so it was kind of a strange circle, you know, the events in this whole thing. But I always remembered being told that I was a big, big disappointment.

Sailing the Transpac Race, 1939

Maslach: The other thing that I neglected to talk about was an event that occurred in 1939. I had been doing a lot of sailing and racing, as I told you earlier, in the Bay Area, and I had an opportunity to sail on the Transpac Race, which started at the San Francisco World's Fair, Treasure Island, and ended up in Honolulu. Actually, the finish line was at Koko Head, which is further out than Diamond Head.

We finished up in the middle of the night. This wonderful yachtsmen in San Francisco heard of me and liked me, and he knew me and he saw me racing and sailing, and so he offered this deal, and I essentially sailed fourteen days, day and night, sailing from San Francisco down to Oahu.

Swent: You were part of the crew?

Maslach: Yes, part of the crew. A 50-foot boat, 55-foot to be precise. Not very big. Today they have single-handed racers going around the world, you know, with 60-foot boats. But we had a regular crew, and we had a bunch of younger Boy Scouts in the crew, incidentally. He was big on Boy Scouting. Not Boy Scouts. Sea Scouts. And anyway, coming back took about a month. Then I saw Honolulu. I saw it in 1939. Waikiki, the beach, the Royal Hawaiian, a couple of other hotels there. At the end of a trolley line, way the hell out. And between that and Honolulu was nothing but pineapple fields. And the Alawai Canal. And you had the yacht harbor there on the Alawai Canal. They still use it for the end of the race. The boats put in there. But it was farm country. Don't kid yourself. There was a military base; there was an R&R [Rest and Recreation] place right there, Fort de Russy. But it was really something, '39.

So I had a wonderful experience there. The reason I was able to do it, because it took time away from working, was that I had had such good jobs, making such good pay up there in Yosemite and also Barrett and Hilp. I worked even one of those years, '40, I worked even in my Christmas vacation as a laborer.

Earlier Work as a Laborer for Barrett and Hilp in San Francisco

Swent: You said you belonged to a union.

Maslach: That's a very humorous story.

Swent: Which union was it?

Maslach: My roommate in college, a man by the name of Duane Gordon, later went into the navy. He was drafted, and he went through officers' training school, and he was with the flying boat business. You know, these big boats that planes could land on on sea and so on. Submarine patrol, what have you. He never made the navy his career, but Duane and I--in fact, he's the one that made the contact with Barrett and Hilp. He knew about the job.

The humorous part was that Barrett was a St. Mary's graduate and a big alumni sponsor of St. Mary's College. St. Mary's was a football power; Santa Clara-[vs.]-St. Mary's was the "little big game" in the Bay Area. That was a major sporting event. You realize, immediately that St. Mary's and Santa Clara are both Catholic universities, private universities, and in many respects this was sort of a Catholic community of the Bay Area, having their game, because a lot of the hierarchy of San Francisco especially went either to Santa Clara, St. Mary's, or the University of San Francisco, which is a Jesuit school, as you well know. In fact, most of the politicians came out of USF. That was the mother school, you know, for the Irish and the Italian population in San Francisco. We did have our ethnic differences, but it wasn't a racial war. Everybody recognized this difference.

But anyway, getting back to getting into the union, Duane one day comes in. We shared an apartment up on the hill, up on La Vereda.

Swent: I had assumed you were living at home and commuting all this time.

Maslach: No, no, I only commuted for six months.

Swent: I see.

Maslach: And then the next two years, a little less than two years, a year and a half, I lived over here. And so I was in the Berkeley community during that entire time. But Duane came in one day. He says, "Hey! We can get in the union."

I said, "What are you talking about?" He told me about the jobs that we had been talking about because he had mentioned it earlier, getting a job as a laborer, working for Barrett and Hilp.

He had some contact that I didn't know about. Anyway, what we did is we went down to the labor temple (which it was called)

on Valencia Street, and about, oh, 14th. Right near the armory. It's this large, green, wooden building. It was the headquarters for the building trades unions in San Francisco: the carpenters, the plumbers, the electricians, and everything else. The union that we got into was the Labor and Hod Carriers Union. Okay? That shows you the days. Hod carriers were still big.

Swent: Still hod carriers.

Maslach: Plaster and concrete and grouting and so on for bricks. That was all there. So we went in and we just kind of, you know, made ourselves invisible [chuckles]. And all of a sudden, a bus comes up. Out of the bus walk about twenty guys, roughly twenty, all big. Obviously football players [chuckles]. And this was St. Mary's, you know. So they came in, and there was some special arrangement, and there's a window open, and these guys all in a line. So we got in line. I was about six foot four, so--Duane was a husky guy, around six foot one, two. And so we just stood in the line.

We had to pay a very small amount of money to get into the union, initiation fee or whatever they called it. And then they took--you got the money deducted from your check; it went to the union. Okay? Those were your dues. So we got our union card, and it was a temporary union card. A real card, but it was stamped. And so we got our badge, and the first thing we did was buy the cap, which was white--white fabric. You know, longshoreman, you see they all wore the same kind of a cap. And so you had that cap on. There was longshoremen, laborers, hod carriers--all wore that--black jeans. Black jeans, not blue jeans. Black jeans.

And, of course, the standard work shirt, which was, you know, a stripe, heavy. Three Brothers or one of the other--you still can buy them. Workshirts, very heavy cloths. And you had to have a hammer. All these things you were told. Okay.

Swent: You provided your own hammer?

Maslach: You had your own hammer. We all had hammers. That was no problem. We were told to report to this building which was being built by Barrett and Hilp. The building is still standing, of course, on O'Farrell and Mason. It's the building that housed the radio stations. I think it was the NBC building or the CBS building. We constructed that during the first summer. Finished it up in the wintertime, and then the next year we were working on--well, you know the big garage in Union Square? We worked part-time there. We worked on the airport, San Francisco



airport, on the United [Airlines] buildings for maintenance, the maintenance buildings, the hangar and so on.

Swent: You were just doing this during vacations?

Maslach: Yes, vacation times only.

Swent: Weekends?

Maslach: Not weekends, just vacation times. So it was interesting. As I said, 83.5 cents an hour was your base wage, and then a dollar an hour if you're pouring concrete, a dollar and a quarter an hour if you were handling a vibrator. You had to know something about that. Every once in a while, I learned to handle vibrators. And also they had another category, which was carpenter's apprentice. That might not have been the right word, but basically it was a carpenter's helper. You got to learn, so I was helping a carpenter. Basically, you were a go-fer, and you were bringing up lumber pieces, you were doing nailing, rough stuff. You never touched any finished work, but you just were useful in a variety of ways.

Swent: You were capable of a lot more than this.

Maslach: I was. I could do more than that because of the work I had done with the Scouts up at Camp Roy-A-Neh, building those cabins and laying roofing and so on. But I was learning. It was the first time I could see the people that put in the reinforcing steel for the concrete work, and see it all wired together. Watched these guys. These were the higher-paid people, you know. Then, of course, you had all the plumbers and electricians coming behind you as you were going along.

So I could see construction in every phase of it as I was working. Some of the things that we did, you know, were just plain hard, hard, menial work. For example, the pit that was dug on O'Farrell Street for that building needed to have a retaining wall, which was on the order of fifteen, eighteen feet in height. You had to dig fifteen, eighteen foot through this sandy soil until you got down to bedrock, and you had to make a good depth incursion into that, and then they would put these enormous beams in.

It's right next to the Clift Hotel, and when they got down low, why, we found out that the Clift Hotel foundations weren't very good down there.

Swent: Ooh.

Maslach: And so the Clift Hotel people came, and they had their people in there, and then they had a program of putting in foundations under the building there. So I always remember going into the Clift Hotel in my work clothes because I had to go in there in order to do something. I forget what I had to do. Oh, I had to get some--some skilled worker that was down there; there was a telephone call for him. I went and got him. I remember going through those elegant rooms. The first time in my life that I went through the Redwood Room. You know that bar?

Swent: Yes.

Maslach: I think it's one of the most beautiful rooms in all the world. Bar or restaurant. But that's how we got into the union. Actually, we were supposed to renew our union every year, but all we did was just keep sending our money in. And so we were quasi-permanent in Barrett and Hilp. We just telephoned Barrett and Hilp's office and identified ourselves and "where do you want us to go?" And we had jobs whenever we wanted them.

That picture that I showed you was taken by a photographer who was doing an article--a writer--who was doing an article on that building. It was a rather unique building. It had a big facade eventually with a tile--very, very wonderful mosaic. Three-and-a-half- by three-and-a-half-inch tiles. It was done by an artist from either Mexico or South America, probably Mexico because that was the days of Diego Rivera and so on. We have a mosaic right up here. Not a mosaic. We have a Diego Rivera--

Swent: Mural?

Maslach: Mural in Stern Hall.

Swent: Oh, really?

Maslach: Yes. It's beautiful. Right in Stern Hall. You ought to go see it sometime. Very nice. He did several murals. He did one for the Haas family, showing a lot of the kids and so on. And Stern. That's part of the whole Haas network, family. Stern Grove and all that.

And so anyway, I got to see San Francisco again in a sophisticated light because by this time I was nineteen, twenty, twenty-one, you know. Of course, Prohibition had been repealed, and it was the night life, not just the Blackhawk. I could now walk into the Blackhawk and sit down on the other side, you know [chuckles].

Swent: No more chicken coop.

Maslach: No more chicken coop. And I remember walking down through the parts of San Francisco. It was just a big time in those days. I always remember, you know, and I think I might have told you this, but to repeat, Doris and I used to go on dates coming over to San Francisco, and we would eat out and stuff like that. But we would also go to places like Top of the Mark. Well, the Top of the Mark, before the World War influx of military, was just empty. Literally, you could walk in there, and we did this time and again. We were both under-age. The bar was in the center, and you would go on the edges, where all these tables were, and you would choose the one you wanted. There was one around kind of a corner that looked out at the Gate, and if the fog was not in and you could look out and see the bridge towers and stuff like that. That was kind of a nice view out that way. Sort of Cathedral Hill and that area.

And the other way around, why, you had Nob Hill underneath you, but you had Telegraph Hill over there. Now partially blocked out by the Fairmont tower that was put up. But we would sit there. One drink. About an hour and a half. They knew we were under-age. We just had a drink, and you would leave a good tip, and that was it [chuckles]. But we did these kinds of things.

I think I told you Doris on her thirtieth birthday, we went there. She was asked for her ID [laughs]. She thought someone put him up to it. Maybe somebody did. I didn't. It was fun.

Swent: You must have been homesick when you were in Boston?

Maslach: Oh, yes. We had made up our mind to get married, you know, and we did a lot of writing. But I think we should leave this to maybe a later time.

Swent: Okay.

Maslach: Because I developed essentially a kind of a new life in Boston, and then we developed another new life. Everything keeps going by these pieces. They are ten-year pieces, if you start plotting them in time. Here was my first big move, you know, to the big city.

Swent: That's a big one.

Maslach: Man, it was different. I'll tell you that [chuckles].

Swent: Well, this may be a good place to stop then. We've got you to Cambridge.

The Excitement of the Rad Lab

[Interview 4: October 6, 1998] ##

Swent: This is October 6th, 1998, and we're at 536 Cory Hall, on a beautiful October morning. We have gotten you to MIT in 1942, wasn't it?

Maslach: Yes. For some reason, this morning I feel like I'm giving you another chapter in the Hardy Boys mystery or the adventures of Tom Sawyer and his electric automobile or something like that. But it's going to be very difficult for me to convey the excitement of being at MIT at the Radiation Laboratory during World War II.

Swent: We've got these wonderful documents here that try to convey that excitement also.

Maslach: The important book is the burgundy-colored one, which is entitled *Five Years*.<sup>1</sup> It gives the official five-year history of the Radiation Laboratory, with lots of pictures. You can trace my picture in several of the departments that I worked with. This was a memento that was given away to any person that was at the Rad Lab.

Now, first, to give you some idea of scale, at its peak there were over five thousand staff members. These are people with advanced degrees or degrees, at least, primarily in physics and electrical engineering but then many in chemistry and mechanical engineering and so on. When I came in 1942, my number was 504, so I was in the first ten percent of the people that they hired. But I wasn't in that grand core of about a hundred that really started the laboratory about a year before I got there. They were the real pioneers.

The history of the laboratory in popular texts is given by this book, *The Invention That Changed the World*, a subtitle being *How a Small Group of Radar Pioneers Won the Second World War and Launched a Technical Revolution*. [Robert Buder, Simon & Schuster, Touchstone Press, 1996] It is very well done, very precise, very accurate. It, however, focuses on the leaders and the people who eventually got Nobel Prizes, for example, for work that they did after the Radiation Laboratory, so it is not as much a scientific text or a historical text as a text that talks

---

<sup>1</sup>Five Years at the Radiation Laboratory, 1991, IEEE MTT-S, International Microwave Symposium.

about individuals and what they did within the framework of this great laboratory.

Swent: I notice that you were in Division Six. Did this mean that you were in the sixth--was this a chronological division?

Maslach: No. Divisions are not chronological. Division 1 was administration and so on. Three was theory; Four was power--in other words, getting the pulse of energy out; and then Five was receivers, which received the pulse back, a very minute fraction of the pulse; Seven, Eight, and Nine were land systems, naval systems, air systems. And we came along with Division Ten, and we had a whole potpourri of jobs. We were not specifically land- or naval-based; we worked across the board. And then Division Eleven was LORAN, or long-range navigation. There was another division after that, which was organized quite late.

But here I am, at the train station. Got down to the graduate house and to MIT on Mass[achusetts] Avenue, by cab. And Al and I got a room in the graduate house, which is similar to the I House [International House] here at Berkeley but larger and much more of a dormitory arrangement, rather than a social arrangement. Saturday morning, woke up, went down and had breakfast in a very busy cafeteria, and went over to the entrance office to register at the Radiation Laboratory.

They worked five and a half days a week, so Saturday morning was a work day. Now, the thing you have to remember [chuckles] is this was wartime, and you had to go past at least two lines of--patrol lines, with soldiers with rifles. And you finally were able to get to the laboratory entrance. The laboratory was distributed throughout the entire MIT complex. The main building, which of course you see in pictures all the time, they had a small wing, but they had offices or desks, that is, out in the main hallway. You had all kinds of activities going on, almost in public. Actually, they were not in public, but they were not heavily guarded, either. Everything was quite visible.

There were a number of temporary buildings and one large permanent building, Building 24. Building 24 was about ten stories high, and the main offices for the director and so on were on the second floor. Well, we got into the first floor, and then we had to sit and wait for a long time and eventually we were given our credentials, which included a pass, wallet-size pass, and then a big badge. I still have these things [chuckles].

Swent: Of course.

Maslach: They had your picture on the badge and your number. We were now enrolled, and we were taken over to Division Ten, which was--the division was located over near the armory on the edge of the campus. It was an old building that was used for manufacturing shoe polish, but it was now taken over. MIT just rented all kinds of space for this enormous organization that started with a hundred people and was to build to over five thousand staff. And that doesn't count support staff because we had, besides, big machine shops, drafting rooms, and all kinds of activities, including personnel offices, publications offices, and all that. It was the size of a campus, only we had a faculty of five thousand people [chuckles] with no students.

So I got a desk and probably as important, a drafting board, drafting machine and so on. By this time, it was about lunch time so we quit for the day and the weekend. Got back to the graduate house and was told that we would have to leave the graduate house in a week or two because the building was going to be taken over for a school of meteorologists, for the military.

So that afternoon I of course started looking for a place to live [chuckles]. If you walk one way from MIT, going to Cambridge, you go through one industrial section and a commercial section and then you get into Harvard Square. Most of the senior people in the lab lived up there in the Harvard Square area. They had colleagues that they knew, and they rented houses and/or apartments in the Harvard area.

If you turned and walked the other way from MIT, you went across the Mass Avenue Bridge to Boston, and the first street, cross street, was Beacon, Beacon Street, famous in literature, history. I was able--Al and I, that is--we were able to find a room, a beautiful room, onto a big patio.

Swent: It wasn't called a patio in Massachusetts [chuckles].

Maslach: No, it was just sort of a brick area with some nice planting and so on. But during the wintertime it was pretty dull and dreary, but in the spring and summer, why, it was quite different. I remember that the next day--

Swent: How much did you pay for this apartment? Do you remember?

Maslach: Oh, it was so ridiculously small. You couldn't believe it. It was a very large room, fireplace and desk area and so on, and sort of twin beds off to the side, you know.

Swent: A kitchen?

Maslach: It was rooming only. Nearby was a very good, low-cost breakfast, lunch place. So we had all kinds of--

Swent: How much did you pay for it? Do you remember?

Maslach: I don't remember. I really don't remember. But I can tell you what my salary was. It was three hundred dollars a month. That was essentially a notch above graduate students' salaries, which were around two hundred and fifty a month.

Swent: That was quite a little then, wasn't it?

Maslach: At three hundred a month, you would be surprised at what I was able to do, and later, next year, when Doris and I were married-- I had a raise in between--the things that we did for three hundred dollars a month. Of course, taxes were low. This was wartime, with controlled prices, and we did not have a car. You could not get a car, really. And it was quite a different kind of austere but adventuresome place to be.

Swent: You could travel anywhere on the subway for--it was only a nickel, wasn't it?

Maslach: A nickel, yes. This was the famous MTA. Getting lost on the MTA was a pretty simple thing to do [laughter].

Swent: There's a song about getting lost on the MTA. And you could buy a pair of shoes for about fifteen dollars or something, wasn't it?

Maslach: I've forgotten what--

Swent: Everything was comparable.

Maslach: Talking about shoes, this was one of the first things I had to buy because New England and its weather, which is atrocious. I arrived there the first week of May, and there was lots of snow on the ground, and we had snowstorms in May. You needed heavy overcoats in May. I remember once going out and one of my draftsmen stopped me and said, "Hey, this is pneumonia weather." People do not go out without an overcoat, and a scarf around your neck.

I think the first things that I really bought were galoshes. You bought the big, four-buckle galoshes that went halfway up your calf [chuckles] because Boston had the theory that God brought the snow and God would take it away in time, and so they would just pile it up and not--they did not have snow plows and snow removal equipment in Boston. I lived through a couple of

major storms there and saw the havoc that that snow and ice would mean.

Well, getting back to MIT, Al was off visiting a family that he knew of, had a letter of introduction to. He finally married the daughter in that family. I was best man at his wedding. I went exploring because that's my wont. I was intrigued with the maps and so on of Boston. Of course, the first thing, if you're going to be living on Beacon Street, which I was going to be doing, you had to go up to Beacon Hill, which meant that you walked, oh, about half a mile towards the center of town and then you went up this small incline, not much of a hill compared to San Francisco hills. But the statehouse was up there, and Sunday morning was bright and nice and you went to different places and saw different things. You walked past the old burial grounds, where a lot of famous people had been buried. And then down to Kings Chapel to see a famous church and so on. So anyway, I kind of wandered around all these historic places.

#### James Lawson and Jerrold Zacharias

Maslach: Monday morning, right at work at eight o'clock in the morning. I always remember being in the cafeteria at the graduate house just before going over to my office. There was a man two steps ahead of me, who had the most disheveled look, piercing eyes, tall, gaunt, and hollow cheeks, major cheekbones and so on, and he was just talking a blue streak and using words which I had been informed, from the manual that I had been given, that should not be used in public. These were classified words.

For example, "radar" was a classified word. He was talking about the projects and ideas that he had and so on. I always remember the look of the man. He was just totally inspired. He looked like John Brown [chuckles] starting the Civil War. Anyway, I later found out, when I attended a seminar that week, that this was Jim Lawson. He is mentioned in this more popular textbook--I mean, more popular description of the laboratory book--as one of the great idea men of MIT's Rad Lab. In fact, there's a comment in that book, saying that Lawson had enough ideas to pay for the staff of the laboratory for the whole month. And this was true. He was just one of these mercurial people.

And in the seminar on the other side, almost--it was almost an adversarial thing, the seminar--was Professor [Jerrold] Zacharias. You'll have to get the spelling out of that book.



Zacharias was just the antithesis of Lawson. He was a rounded man.

Swent: Jim Lawson. Is that it?

Maslach: Lawson, yes. Jerrold Zacharias, I think it is. He's got a strange first name. Anyway, Zacharias was slightly rounded, very professorial type and slow-spoken and very logical in his approach, almost ponderous, really, in how he would answer a question. Lawson, on the other hand, was a person who was flinging his arms around and going up to the board and writing equations like mad. Between the two of them, they had this fantastic debate. All the rest of us would just sit there [chuckles], looking like a tennis match from one to the other.

These seminars were outstanding. You could not believe the excitement because people in the audience--not me, but the people in the audience who knew exactly what was being discussed and here they were listening to two super heroes in this discussion. So that was kind of my introduction to the lab.

#### Luis Alvarez Requests an Antenna Design

Maslach: On the very first day, Luis Alvarez, who later became a Nobel Prize winner from Berkeley, in physics, came and visited me. He had noted in the register that I was mechanical engineer, and he had some real problem in mechanical engineering and he wanted to talk it over with me. So here I am, right fresh out of school--in fact, I don't have my diploma [chuckles]; classes are still going on in Berkeley--and a future Nobel Prize winner, one of the great physicists of the time, was, you know, asking my opinion on things.

One of the first things I remember we discussed were early warning devices, which were being put up along the Pacific Coast. Remember we had submarines lobbing shells into Santa Barbara oil refineries. So he had his ideas of what the mechanics of the antenna should look like, but he had no idea how to support it. I was sketching different kinds of supports, and they all ended up to be like pyramids or cones. Eventually, all the big antennas used in the world for satellite tracking and everything else are essentially that basic design. It's a logical design for the antenna. So it was very exciting just--

Swent: This design that you drew.

Maslach: Well, I actually sketched all of these designs, and I cannot claim paternity for any of the future designs because, as I said, it was a logical thing for the very large antennas that are being used today, fifty-foot diameter. Many years later, when I was dean of engineering at Berkeley, I was asked to go to Hawaii and repair one of the big antennas, and I did. It was sort of *deja vu* because the man who designed that antenna was the best man at my wedding [chuckles], Bob Grenzbach, and so I knew quite a bit about that antenna. He had designed it after the war, when he was working down in a firm down in Cohasset, Massachusetts, just below Boston.

Anyway, I spent about a week doing all kinds of preliminary designs, not only for Luis but I was learning something about other programs that needed mechanical help in terms of structural design and/or instrumentation design. To kind of clarify it, basically everybody has seen radar antennas and transmission devices. It's a parabolic dish that's mounted on a yoke which can allow the dish to be tilted up, and the yoke rotates so you get 360 degrees horizontal coverage, so you get to scan the sky with this antenna. So that's a mechanical device, very simple. But it had all kinds of instrumentation hanging out of it to tell the radar equipment that it was pointed in a certain direction, certain azimuths, certain altitude, and so on. So that was a major part of mechanical engineering for me during part of the MIT period.

The other end of the line was the receiver that received the signal through the antenna, and that ended up as a dot, if there was a target, on what was called a plan position indicator, PPI. You're looking downward at a plan view, and the position is showing in azimuths, and the distance out from the center would be the range. That would be the device which had rotating parts and all kinds of other instrumentation. So another mechanical device, heavily mechanical device, is the display. The rest of radar, very heavily, is electronics. And in many respects, the only fault I could find with this book on the history of the laboratory is that they never, in that book, emphasized the enormous development of modern-day electronics, which was done during that time.

These were done by people who were not necessarily electrical engineers. For example, Britt Chance was a physical chemist. He designed a gating circuit which could be used in so many different ways. It became truly one of the breakthroughs that made radar the precision instrument it is. He later--he and his wife, who were very active there at the laboratory, later had a famous son. He is a naval architect. He has done design work on all kinds of competitive yachts.

Two Months of Crammed Education in Radar

Maslach: After about one week, I was told that the lab had not really been organized to get so many people so fast, and so I was told that I, along with lots of other recent hires, would be given a two-month course in radar. We were to report to the Harbor Building, which was close to the South Station in Boston, and we would study, receive lectures, do laboratory work, and so on. Well, this was the most horrendous learning experience I have ever gone through. We had four hours of lecture in the morning, started laboratories at one-thirty in the afternoon, and quite often we'd be there at midnight. And every Saturday there was a three-hour test. That is really crammed education!

Swent: Who was teaching it?

Maslach: Well, the various people who were teaching were experts in the particular areas that were being covered. In fact, we started off with the theory of radar and what actually happens, the propagation of energy and the return of energy and so on.

Swent: Had it been developed to that point by then?

Maslach: Oh, yes. In fact, if you go back in the history of the development, the United States had a patent on radar from work that was done by the Bureau of Standards when they were doing experiments on the Potomac River, transmission of microwave energy, and they noticed that whenever a ship went by the beam was interrupted. The transmission was interrupted, and then they actually found that the transmission was reflected. They saw that back in the early thirties.

So the concept was pretty well known, but the instrumentation to make it work--you know, that was the real problem. And so you had transmitting power systems that could electrocute you in the laboratory if you didn't watch what you were doing. And these would transmit very high wattage, hundreds, thousands of watts. And then, coming back, you would be looking for reflections which were down around ten-to-the-minus twelve or fourteen watts. So you had a range of ten-to-the-minus seventeenth in power out and to power received back. So it was a really difficult problem. You had to develop receivers.

So we were taught power transmission out--and this was a pulse of energy, incidentally, and not constant transmission, not like we have in our electricity at home. And then you had the receivers and you had all of the devices that indicated range and

direction--direction being, of course, very easy. And then you had all kinds of theoretical problems involving the transmission antennas, the parabolic antennas, and so on. You had hands-on activity with real, working systems.

I remember one night a major storm came by, and with the radar we were tracking the clouds which were of course filled with water. They showed up great on the radar screens [chuckles]. So after two months, why, we went back to the laboratory. But in those two months of being down there, it was just another part of my education over all, but it was also the education in terms of the history of Boston and New England history.

Harbor Building was just three or four blocks away from Faneuil Hall and a famous restaurant is still there, nearby building, Durgin Park. This was, of course, during the war. Very few people then. If you go there today, this is a big tourist area. But we would go upstairs, where Durgin Park Restaurant was located, and we would have a meal. I met a waitress there, older woman, Marie, very outgoing. Wanted me to sit at her table, and we had long tables. Then we had some small tables, but the long tables were the main thing.

Politicians would come down in the other direction from Beacon Hill. I remember once having dinner there with Leverett Saltonstall when he was the senator of the United States. He was telling me what I should order. His favorite was a horrible-looking mess called Indian pudding, which is cornmeal with molasses. It's an acquired taste, really! But we would go there quite religiously because it was a good bargain during those days. Luncheon would be about fifty cents.

Later on, when we were married, Doris and I would go, and always be greeted by Marie. It was very valuable that we had that contact because if the restaurant had steaks, which were, of course, rationed, why, she would whisper, "We have filets tonight." Of course, we would order a filet [chuckles]. But we had just a wonderful time over the years, and I have often gone back there when I visited Boston, MIT, after the laboratory experience.

But Faneuil Hall was a short walk, and a slightly different direction was North Church, where the lanterns were raised, and nearby was Paul Revere's house. We had all of these things. You know, the old South Church was there. And then, of course, City Hall for the city of Boston, which is a historic spot where the Boston Massacre occurred during the Revolutionary days. Anyway,

I just wandered all over that part of Boston, learning all about Boston.

Three Months to Provide Radar 582 for the Panama Canal

Maslach: So I got back to the lab and I got my first job, which is mentioned slightly in that book about the laboratory, and that was that there was a need to provide the Panama Canal with radar. I was told that I had three months in which to design, build and ship three antennas and three sets of receivers. I didn't know what that meant, really. I never had a job like that, and so I just got going. I went to see other people in the laboratory, to see what they were doing--

##

Maslach: In the early days, we were outnumbered enormously by physicists, and so I just got to know so many of these people. They were later major figures in the Cold War and also in the postwar electronics scene. I just cited Luis Alvarez as one, but there were many others as well.

I started working and, as I said, we worked five and a half days, but everybody worked more than that. I would be there quite often late at night, and I designed the antennas and then I had to have a certain amount of work done by drafting and then in shops. Well, I won't bore you with all the projects I had, but I--

Swent: No, I would like to hear about some of them, at least.

Maslach: Well, I'll put in a couple. But that was the first major one and it had a major impact. I did get it out in three months, and I did learn about shops and getting work done. And in a short time--because I do have a prodigious appetite to solve problems--I was soon using about half the shop time for all of Division Ten [chuckles] and about two-thirds of all of the draftsmen. I had all of these people working for me, and I suddenly realized (later) that I was in administration. I mean, when you have a dozen draftsmen and you had to talk to them every day and you had a dozen people in the shop and you had to check them every day, on your projects and what was being done, there was an introduction essentially to middle management, I'll call it.

Swent: I had one question. I guess maybe this is the time to ask it. In the *Five Year* book, it said that you developed and engineered

radar components for production and that the work was particularly sensitive to tactical uses; that you therefore did much tactical thinking to be ready to meet systems or service requests. I wondered if you wanted to expand on this.

Maslach: Yes. In that first big job, which of course was right there in 1942, I noticed one time, in what they called the "roof laboratory," which is mentioned many times in this book--that was the original laboratory, where the first radars were set up. I would go up there because it was an exciting place to be, especially at night time because they had all kinds of people who left their desk and would come up and play around with the systems and watch what was happening.

I recall seeing a smaller radar that had been hoisted up into what was called a "radome." It was a device that sheltered the radar from the elements. You lost transmission power through this skin device, and you lost receiving power, of course, coming in, so radomes were not useful devices except for protection. Long after radar was developing, why, they were developing only radars that could stand out in the elements. Mine, 582 for Panama, was designed to stay out in the elements. But looking at them raising that radar, and I thought, "Gee, that's kind of interesting."

The problem early on in radar was to learn where to situate the radar because valleys and hills can give false readings. You can get reflections, ghosts, and everything else. So just saying they could put it on top of a mountain isn't the proper answer. They really had to look and see where to mount the radar. I had the idea of mounting the 582 antenna on a truck. I'm using that number because that gives you a way to index it. There are some pictures there of the 582 on a truck. And essentially we just used yachting equipment to raise the antenna through the roof of this truck. One of the three antennas that went to Panama was so organized and--the historical value was that the big production 584, which came on a year later, was done by General Motors, and was a truck-mounted radar and they had a regular hydraulic lift system that took the radar right through the roof. It looked just like mine, only a lot more sophisticated [laughs].

Swent: You used the term, "yachting equipment"?

Maslach: Yes.

Swent: Just what they used on yachts.

Maslach: Yes. Blocks and tackles and so on.

Swent: Okay, all right.

Maslach: I knew all about sailing [chuckles] so that's what I did. I always remember going up to that roof laboratory because, as I said, it was so exciting. I remember one time we had a new radar, very powerful, and it just went around in a circle. The first time it went around the circle, it was pointing up to an area--there was this bridge called Cottage Farm Bridge. Industrial building up there, and it had a lot of lighting equipment on the roof, which of course was not used during the war because of blackouts. But the power transmitter part of that radar would light up an entire side. So all of a sudden, that sign was on and it was off. So we would go back and forth lighting that sign [laughs]. We had a lot of fun during those times; it was new to everybody. "Gee, we could have that much power. We can light that."

As I said, it was a very, very exciting time.

#### Marblehead and Yachting with Charles Francis Adams

Swent: It must have been.

Maslach: I augmented the excitement of the laboratory by constantly traveling and looking at things on Saturday afternoons and Sundays. For example, one of my favorite places (still is) is to go from Boston up to Marblehead. It's a big yachting center. Beautiful, natural harbor, and a great historical town. Cemeteries, museums and so on. In fact, the famous painting of the Spirit of '76 stands about ten feet high and about seven feet wide, and it has the drummer boy and the old man on the fife and so on, and someone carrying the flag. That was drawn--I mean, painted--by a semi-primitive artist in Marblehead, and for years they had it right there in the Marblehead city hall, right in the main office. They had plexiglass to protect it from the people who were working there. But there was this famous painting. Now they have it in a worse location, in the same building, in the basement. But one room, and there it is. You think of it as a great historical thing, and it's treated as something rather simple.

But I would walk around Marblehead. In the beginning, you could take a train from North Station to Marblehead, but then they did away with the train and you had to take a bus up there. But I would buy the newspaper on Sunday and go up there after

breakfast. Sit up there in the parks and so on and watch the yachting.

To stay on that same subject, I took a week off the first week of August because I had met someone sailing down at MIT in the basin where there were the small dinghies that they would race on Saturday afternoons. He had a boat up in Marblehead, and there would be a regatta, Marblehead Week, so I thought it would be a good, one-week vacation. So I took off and went up there. He and a bunch of other men rented a small house on Marblehead Neck, where the two yacht clubs were. The Corinthian was the one that we sailed out of.

And Saturday morning we sailed our first race, and we came in second. His boat was not well maintained and was rather leaky, but we were constantly beaten by a boat that was well maintained and in good shape. But we had second places all through the whole week [chuckles], which was quite good.

We were sitting in the yacht club, having a sandwich and a beer, and we were rather conspicuous because we were two men in the twenties, during the wartime, who looked like able-bodied people, you know [chuckles]. So a man, an older man, came from one of the nearby tables and he was a chunky New Englander, with a New England accent, and asked if we were busy that afternoon sailing or were we available as a crew. The man that owned the boat said he was going back to Boston because he had to have a sail repaired. I said, "Well, I'm free." So he said, "When you're finished, could you come over and sit with us?"

I said, "Okay." I looked over there, and it was two older men. I mean, one was quite old, in his seventies, eighties. I shouldn't say it that way now that I'm seventy-eight. But he was small and quiet. And another man was there, who lived on Marblehead Neck. So after our lunch I walked over and introduced myself, sat down. And lo and behold, I was talking to a legendary figure, Charles Francis Adams.

Swent: My goodness!

Maslach: Charles Francis Adams had been secretary of the navy and a variety of other things. Had been one of the great yachtsmen in the defense of the America Cup in the twenties and the teens of the 20th century, and had his own big boats, and so on. He was a major, major figure historically because he's a direct descendant of John Adams and John Quincy Adams. So I couldn't believe it, you know? [chuckles] The man that had come over and asked if we were available was actually his boatman, who later, I found out, was also his chauffeur [chuckles]. And that other old man there



with him--I have forgotten his name--it was a New England name. I kind of lean toward something like Payne, but I'm not sure, so I can't say what his name was. But he had a big cruising sailboat there.

What they were looking for was some strong back and weak mind because Charles Francis Adams owned a thirty-square-meter, which is the largest that they sail out of Marblehead during Marblehead Week. It's actually about forty feet in length and only about eight feet wide and about six feet deep. It's a very unique boat. It was developed in Sweden. Has a mast that runs straight up and then curves at the very top. It's a very small sail area. Thirty square meters was the sail area. Beautiful yachts. His, of course, was a wooden hull which was polished mahogany, you know, varnished. It was just fabulous.

So we--the chunky man took me downstairs and went into a locker and found a sweater which was the sweater they all were wearing [chuckles], so I had the uniform of the boat, and we went out. Well, it was no contest. Charles Francis Adams just was so good and everybody else was so mediocre. You know, his boat was so perfectly maintained. He knew his sailing; he knew his strategy and everything else.

The other man--the boatman and I handled jib sheets, and the older man handled the main, and Charles Francis Adams was at the tiller. No spinnakers. Wartime rules. He was so far ahead when he finished, it was ridiculous. And he won every race during the week.

So we came back, went to the bar and had a drink, and he was signing. He told the bartender that I could sign for anything and just sign his name as well, under it. And so I signed something for the bartender so he would recognize my signature, and I had carte blanche at the club for meals, drinks, and whatever.

Well, just before I was ready to go home, which was a short walk, Mrs. Adams came in, so she asked where I was living, and I told her we had taken over this empty house and had sleeping bags and air mattresses [chuckles] and so on. We had food for breakfast and stuff like that. So she said, "Well, you must know Mrs. So-and-so." Well, I didn't. She's in the house right next door, the one with the white picket fence, beautiful New England cottage. Fabulous yard and the flowers. You couldn't believe the gardening that she did. And she was friendly with her, a younger woman, of course.

She said, "Why don't you ask her to come down to the buffet and the dance tonight?" There was a dance. This was the opening of Marblehead Week, Saturday night. So I walked over and found her in the garden, gardening, and I transmitted that the Adamses would like to have her come down to the dance and buffet dinner. She was so, so thrilled. She was about forty years old. Her husband was in the navy in the Atlantic somewhere, on active duty.

We decided we would meet at six o'clock, whatever it was. And go down. We were told, actually, when to come. But I have forgotten the precise time. But we went down, and she was just a wonderful reservoir of information about Marblehead and Marblehead Neck and yachting and everything else. They owned a boat, but it was not in the water because he was on active duty.

We had this buffet dinner and we had dancing with a good orchestra. What they did while we were having dinner was they turned on the switch which turned on the lights. Truly you felt like you were in the days of the Great Gatsby. Hundreds of Japanese lanterns, paper spheres, were strung out all over those acres of grass between these two clubs. Big, big clubs. And they were lit. This wonderful lighting of all this color, you know. These lanterns with their paper patterns. I always remember it was just fabulous. Never saw anything like that.

Swent: What about the blackout?

Maslach: Well, Marblehead was on an inside, facing the land. Marblehead Neck, I should say. And was facing Marblehead and was actually screened away from the shipping lanes, and so on.

Swent: So they could do that.

Maslach: They did it for a short time. I don't know how long they had it on. But I always remember those Japanese lanterns. And it was a piece of New England and East Coast that you just don't see-- never saw here on the Pacific Coast.

Swent: No.

Maslach: So anyway, she was obviously a very good friend of Mrs. Adams. They spoke a lot. She volunteered to escort me or guide me in Marblehead, and I told her I had been in Marblehead several times already [chuckles] and walked around, and I knew quite a bit about Marblehead. She checked me out and did find that I knew quite a bit [chuckles].

But Monday was a day off. We sailed on--I sailed on Sunday morning and Sunday afternoon, and then Monday was a day off. But then we sailed Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. Adams proposed that I drive with him down home. He would take me to my house. His house was down in Quincy, which is on the southern end of Boston, right on the northern end, really, of the Cape Cod region. He had an enormous place down there called the Tules, the marshlands. And so here I am, being driven in this big limousine [chuckles], with a chauffeur, and Charles Francis Adams and his wife and I in the back seat, and I get driven up to my little old rooming house on Beacon Street [laughs]. So that was a fantastic experience in learning about New England.

Swent: Wonderful experience.

### Elizabeth Blaney

Maslach: But it was to be overshadowed by the fact that one of my drafting people was a woman by the name of Elizabeth Blaney. She was a tall woman, had graduated from Vassar, had a degree in landscape architecture and therefore had drafting talents, but entirely different from mechanical drawing in terms of talents. She had volunteered, and they had taken her. The Blaney family occupied several pages in the social register. Sir Henry Blaney stepped ashore on Blaney Beach, near Swampscott, which is near Marblehead, with his three-ship armada in early 1700 and became a major figure in Boston society, as well as an industrialist of the times.

The Blaney family of the moment, when I was there, in the forties, was headed up by Dwight Blaney, who looked like Monty Woolley in that old comedy, *The Man Who Came to Dinner*. He had that square-cut beard, a white beard. Handsome man, shorter stature. Getting quite old but still very, very feisty. And he was a draftsman, and his draftsman companion was John Singer Sargent.

So the two of them went on a sketching tour in England back in early 1900s, maybe in the 1890s, for all I know. And along the way, they met the Hill family. I notice in this last copy of the *American Heritage*, the historical magazine that I take, that Hill is listed as one of the top forty most wealthy people. He was a partner and a friend of John P. Morgan and had a big piece of the New York Central Railroad and the Boston-New York Steamship Lines and so on, so they were a very wealthy family.

So Sargent and Blaney kind of toured along with him every once in a while because the Hills had three daughters. The daughters were enamored of these two artists [chuckles]. Eventually, Dwight married one of the Hill girls. He went from penniless draftsman in Boston, with at least two or three pages already in the social register--he had the name but no money--so suddenly he was a multimillionaire.

He used the money very wisely. Continued his art work, and he won major prizes. He won the gold medal, for example, in the 1915 San Francisco Panama-Pacific Exposition, for an oil painting he did of an island that he owned up in Bar Harbor called Ironbound. A thousand-acre island.

Libby kind of adopted me. She was very impressed with the fact that I had already been to all of these different places. The Bunker Hill monument, which she had never been to [chuckles]. And viewed "Old Ironsides" and things like that. I had spent a week sailing up there in Marblehead.

The Blaneys had two houses on Louisburg Square, Beacon Hill, which was the address to have when you're in Boston. The family originally had six children, Libby being the youngest. Two died fairly early. One woman went on to head up the American Red Cross, and another man, who was still alive when I was there, David Blaney--and I got to know him and his family very well. In fact, I'm still in contact with his children, one of whom is living out here on the Pacific Coast.

Well, we were introduced to Boston society within that framework in a way that you just could not imagine. You have to read *The Late George Apley* and *The Proper Bostonians* and so on to get some idea of what we were talking about. This man had two houses filled with the most beautiful antique furniture from the Colonial days that you ever saw. In fact, he had a fetish about not sending anything out to be repaired because they would steal most of it and send you back part of it. There were such instances. Everything in the house was a first edition book or a painting. He had lots of John Singer Sargents, all inscribed "To my friend, Dwight," and so on. It was like living in a museum.

Later on, of course, when Doris came--it was March of the next year, 1943--why, she was adopted by Libby. She was our maid of honor [chuckles] at the wedding, and she arranged everything.

So I was invited down to their house in Weston. Since you have been to Wellesley, you know where Weston is.

Swent: Yes.

Maslach: If you're in Wellesley, it's called the Weston Road; and if you're in Weston, it's called the Wellesley Road.

Swent: Right [chuckles].

Maslach: It does connect the two towns. And about halfway between them, just before you get to the Worcester Turnpike, there was this beautiful house built 1700, roughly, and it's off to the side. It's just a fabulous museum of its own. I remember she invited a bunch of us--and she called us her "California barbarians"--down there, and we had a wonderful buffet and just an afternoon and evening down there. It was about half a dozen of us from California who went down there. Again, a museum. Just the most beautiful guns and--there was a big buttermold that was used for a famous banquet for Lafayette when he came to the United States. And there were long rifles, you know, with the barrels six feet long and stuff like that. It was just a fabulous thing to see. You know, you didn't expect this. In fact, 90 percent or the people I knew that came to Boston never had any of these experiences. I realize that a lot of it is due to chance, but also a large part of it is due to the fact that I am outgoing and I talk to people.

So when I was down there, for example, at the Harbor Building, taking radar school, why, just a couple of blocks north of the Harbor Building was T Wharf. Well, not the famous tea, t-e-a, but shaped like a T. It had this big long loft building on the water, which they had carved up into apartments. So she introduced me to a man, Ed Meyer, architect, and his wife, Marjorie, and we became very close friends. In fact, we visited there and they visited here up to the last few years. Marjorie Meyer died at age eighty-eight about three years ago. You know, they were an entirely different class of people.

My work in radar antennas, radomes, and receivers was augmented by work for other things, on trainers, training people how to use radar, which is one of the groups in this volume of Five Years. Ray Garman was the head of it.

Swent: In the book it just used initials, R.L. Garman, so it was Ray Garman.

Maslach: Yes, Ray Garman. He and I became quite close.

Swent: He was the leader of Group Sixty-Four.

Fran Hagerty, Builder of Radomes

Maslach: Right. So I did work for Group Sixty-Four, Group Sixty-Three, and Division Ten and on and on and on. And to give you some idea of the things that happened--you said you wanted a couple of examples. Well, we designed these plywood radomes using a firm down in Cohasset called Hagerty Construction or whatever. Fran Hagerty was another part of New England history. He represents the Irish. They were well-to-do Irish. His mother lived in Cohasset in a beautiful historic home, very, very modern, ultra-modern, designed by Marcel Breuer. He was a famous architect in Germany. Came to MIT. He was one of the leaders of what in Germany was called the Bauhaus movement, modern architecture. Most famous for his design of the Barcelona House in the Barcelona World's Fair. You probably have seen the chairs of chromium and black leather, very springy and very comfortable. Well, those are Breuer chairs, Barcelona chairs.

I would stay down at the house and look out and there was Minot Light, a big lighthouse, right out on an island a mile or two away, and enjoy wonderful food at Hugo's, the restaurant there in Cohasset. I worked with Fran on the design of radomes and the manufacturing of them. He had a shop in which he--almost as a career of his own--designed and built pulling boats, including eight-man shells, you know, for colleges and universities. He was trying to compete with Pocock, who was the big pulling boat manufacturer up in Seattle, who made the best boats at that time.

##

Maslach: Fran Hagerty was just a wonderful, wonderful person. He had this wonderful Irish face and he was a great oarsman and therefore a great athlete and he lived the kind of life that you would expect somebody like that, with all that energy, to live. He had this facility, and he had ability to work with very thin plywood. He was a natural and made many radomes for the war effort, to protect what was then considered to be secret and/or fragile in the antennas. After, we then just put antennas outdoors.

You can still see radomes--some of them, I'm sure, were built by Hagerty--up on mountaintops. For example, there's a whole series of them up on Mt. Tamalpais, and there are some up on Mt. Diablo. They're used mainly to shelter microwave transmission equipment, which was not designed to be outdoors.

At any rate, I got to know Hagerty, and I got to know another slice of New England. He knew Libby Blaney because the

Hagertys lived in Boston, up on Beacon Hill. I would go down to Cohasset quite often on a Friday or a Saturday and spend a half day Saturday and then the weekend with him. I would see Cohasset and Scituate, which are two beautiful coastal New England towns. The church in Cohasset was built by shipwrights, and you can see the curved ceiling with the ribs and so on. It's just like a boat, upside down.

### Designing the Base for Radar Antennas, a Free-Wheeling Operation

Maslach: I want to give you one example of the free-wheeling operation that MIT was. The book gives a false impression because it gives only the outline, skeleton, of all these divisions: the theory division and so on. Well, for example, Ernie Martinelli, whom I knew from Berkeley, was in the antenna group. One day, one of his colleagues was having a problem with an antenna design, to be used for navigational purposes. So Ernie just told him, "Go over to see George."

I remember a Friday afternoon [chuckles], and this guy walks in, a physicist. I could look up his name, but I have forgotten it, really. He was carrying two packages. One was like a monstrous bird cage; the other package was wrapped up and I couldn't see what was in it. He put down this bird cage, which sat on a platform and was about five feet high and kind of just vibrated back and forth. I'm looking at it [chuckles], and he takes out and unwraps two antennas that fitted onto this birdcage: one vertically upwards, on the upper side; and one vertically downwards, on the lower side.

I recognized the antennas, of course, because I had taken radar school and I could talk his language. I knew all about interference and everything else, and patterns and what have you. So I said, "What's the problem?"

He said, "Put your foot down on this base." I put my foot down and he put his foot down on the other side. Just pushed it with his finger, and the thing just vibrated, oscillated, you know. I'm not exaggerating. It oscillated in an arc of maybe six inches. I said, "Okay."

And so [chuckles] he said, "This is supposed to be mounted on top of towers, like flag poles, at airports and other strategic areas and will be part of a network to be mounted on towers all throughout the world, as navigational aids." You know, "Ernie said you knew all about mechanical engineering,

structures and winds. You're a yachtsman, and so you would know what would happen to this thing in a wind." And he said, "This was designed by a radio company." I won't mention the name; they're still in business [chuckles]. "But they don't have any mechanical engineers."

I said, "What's the time schedule?"

He said, "Well, you know, it was supposed to have been finished last month."

I said, "You can take the antennas, but can you leave that structure?"

He said, "Yes."

So I said, "I might get to it in a couple of days or next week. I have got to finish this up. It's due next week, and I want to make my schedule."

So I just sat there after I worked on my work, and I kept looking at this stupid thing, and then I--Saturday morning, a major storm had come in. I remember getting over there to MIT across the Mass Avenue bridge, which was a horrible bridge to cross because the wind came down the river; I would just freeze. So I remember getting over there. This is the fall or wintertime. Saturday. And I just looked at this crazy thing. It just bothered me, you know? So I just finished my work Saturday, and I had about an hour, so I just sat, looking at this thing and thinking how I would design it.

Getting ready to quit. Looked outside, and the weather was miserable, so I just stayed there, and I started designing. And I stayed there through dinner. I think I left about ten o'clock at night [chuckles], when the storm abated a little. I couldn't face that Mass Avenue Bridge with the heavy wind. There was very bad transportation. There was an old streetcar that went on Mass Avenue Bridge. They did away with that, and they had buses, but off hours and weekends, transportation was really very, very poor. The subways were the big things, and the rest of the time you walked.

So I stayed there half the night, and I got there Sunday morning, and I kept working. I stayed there Sunday night. So I took two ten-hour days plus--you know, just finished the whole thing. It wasn't much to the design. But years and years later, you know, through the years after I had finished that work, why, I could go to airports and spot the antennas. Now you can't see any. They have got all kinds of new, modern ones. Much better



design. They're smaller and everything else. But I could spot these things everywhere.

### Contributing to the Design of Glide Control Approach Radar

Swent: Based on your design.

Maslach: Yes. And the important thing I want to emphasize here is that a man that I don't even know from a division way over there comes over and talks to me, and that's how something got done, and that's the way the entire lab was. Luis Alvarez came to me many times, and he was such a wonderful character. Brilliant, absolutely brilliant. And he's the man that designed the radar system called glide control approach. This is a technique whereby you would talk down a plane by using ground radar, and you would have the flight path all laid out.

I have landed in planes in storms that have used that glide control approach, and thank God for Luis Alvarez. He won the Collier trophy, which was the premier aerodynamics trophy, for his design of that equipment, which had two big antennas, very strange-looking antennas they used to bring the ship down. I contributed not in the antenna design but in the receiver designs and the plan position indicator designs within the control room.

Basically, you have a rotating arm, lighted arm, as they show here, like that [demonstrating], and if there's a target, it would show up as a blip. There would be a target here. Well, that would be your aircraft, and you would want to bring it down. What you would do is you would have a plastic plate over this radar, showing the glide path, the path that that blip ought to follow in order to come down to ground. I'm using a plan position indicator to show that what they used for two oscillating antennas that went back and forth, like this [demonstrating], and they would bring it down. I did the work on that plan position indicator console and the devices on it.

### Designing a Plan Position Indicator Console for Use on Ships

Maslach: One of the items that I was proud of and went into big production was for a navy job; they wanted repeater indicators. In other words, repeater scopes, which they could have taking signals on board ship from the command center, the CIC room, to various

locations on the ship. Of course, you'd want to have a couple up there on the bridge; then you'd want to have some at the gunnery control areas and so on.

So this was sort of a separate indicator. Separate indicator, which could be used around the ship. I enjoyed that design. It just happened to be--I happened to be in a good state. I don't know why [chuckles]. But it was later in my career in MIT. And I designed a console, about the size of this chair but up high, to the size--solid--up to the height of this table. The features were panels around the side which could be quickly removed by aircraft-type fasteners, which I thought was a nice little touch. You did not need tools to work on this piece of equipment.

I credited the fact that I knew a lot about shipboard life, from my yachting work. You know, if you're going to work on that indicator, you want to use both hands. The old adage on ships is one hand for yourself and one for the ship. And so if you're trying to use a screwdriver or something to take out a long screw, this is a miserable job to do on a ship, so you want everything to be handled quickly; you don't have to have special tools, and so on.

And then on the top, which was the best part of it, I had aluminum casting which was about two feet long and about sixteen, eighteen inches wide. I had the plan position indicator centered, which was circular, and room for the various controls. You don't have many on a repeater. On the CIC are the indicators that control much of what is coming out, so you only need to increase brightness and darken it and this and that.

### The Importance of Handgrips in the Design

Maslach: But there was one key feature, and that [chuckles] was very simple: That is that if your forward edge on this--I'll use this chair--the forward edge of this casting, on either side, I put in a handgrip. I cast in slots. I had a big hand, so I made it large enough to get my hand, or maybe a little bit more, and so I had these two handgrips in there. People couldn't understand why I did that. I had all kinds of other little gizmos in there, which I knew would help.

When they made the prototype and then they made about ten copies, why, the copies went out to the various testing groups in the navy, and some, of course, went immediately onto aircraft

carriers or something and they were being used at sea. Well, when the report came back on that design [chuckles] of those repeaters, they thought it was a great design. It was just perfect, just what they wanted, and ordered umpteen thousand, you know. I'm not joking.

All of a sudden, two thousand of these indicators are being built. The one thing they mentioned [chuckles], they highlighted, was the handgrip. Well, I knew that at sea the ship rolls and yaws and pitches and so on, and you want to look straight down and you want to look at it as a map, essentially, and you want to have something to hang onto. And so they could bolt the thing down. I had arranged the bolting at the base, and they had this handgrip. Those handgrips [chuckles] were probably one of the best thoughts I ever had on design [chuckles]. I never heard so many comments. I had mail. I had people telling me about it years later because I went to an organization years later, which was still doing radar work. But that was just kind of a funny side issue. It wasn't even my main project.

#### Jerome Wiesner and Designing for Airborne Early Warning Radar

Maslach: But you met so many people. And this is what I--I want to get some people in here. For example, my neighbor where we later lived, my wife and I later lived, on Hereford Street in Boston. Right around the corner on Beacon Street was Jerry [Jerome] Wiesner and his wife, you'll get it out of the *Five Year[s]* book. Jerome Wiesner. He later became president of MIT and then was science advisor to [President John F.] Kennedy. Very close to the Kennedy family.

So every once in a while Jerry and I would walk across the bridge together, walk home, you know, and stuff like that. We would get talking. Of course, you're walking along and "What are you doing?" And I would tell him about this indicator, which I kind of liked. And he says, "I need you." He was the project leader for airborne early radar, early warning radar. You've seen pictures of this strange, large aircraft, which by itself was not strange but had a strange shape. On the top--there's a big round dome on the top. It's like a dish, like a saucer, flying saucer. It's about twenty feet in diameter.

And here's this beautiful aircraft body, with this extraordinary [chuckles] protuberance up there. Well, that's the antenna for very sophisticated early warning radar. You can keep these ships up there for a long time, and they have as much or

more power to identify aircraft and guide aircraft as any airport in the United States. It's really--you can have a dozen people up there, among indicators, working. Very sophisticated indicators now, but this was the first project, and we had an old beat-up, wrecked fuselage of the plane that this was going to be installed in. It was out there in one of the garages.

My job eventually was to fill the sides with these indicators. They liked my navy indicator and all of its little features, so here it was different. People in chairs were strapped down and they're looking at a vertical tube, slightly canted, really. And using all kinds of strategic devices on the face of that tube for giving instructions to aircraft that were going to attack and so on. So this was a very, very sophisticated program. It was at the end of the Rad Lab period. It was maybe 1945. But it became a major item in our arsenal, and we still see these planes all over the world. See pictures of these planes.

I use that just as another example of how just talking to somebody and here you are involved in another project. And everybody was allowed to do this kind of moonlighting in other areas. It was encouraged. The place was just five thousand minds, loosely organized in divisions and groups, who were constantly thinking about projects and had friends everywhere who would tell you about their work.

Swent: You mentioned this intensive course that you had at the beginning, with lectures and labs. Was there formal instruction after that at all?

Maslach: No.

### Education Seminars

Swent: Seminars?

Maslach: We had seminars. The Zacharias seminar, as it became known, was a voluntary thing. I attended it quite regularly, just to keep up to date. Then every Monday night we had a seminar for the entire laboratory in the big auditorium at MIT. These were sort of sessions to keep you up to date on what was happening in the world. For example, I always will remember that historic seminar when Sir Watson Watt of England came over. He was the man who many call the father of radar. His claim to fame was that he took the magnetron, which is the power tube that shapes and puts

out the pulse of energy, and what he did was he strapped the magnetron--he had a wire circle, which contacted each of the poles in this magnetron. There are pictures in this book, especially, of the magnetron and what its shape looked like. That, in fact [showing photo], is the picture of the magnetron.

Swent: It's the one on the cover of the *Five Year* book.

Maslach: Those are the pole pieces. I want to see now. This doesn't show the strapping [laughs]. This is what Sir Watson Watt did and was able to increase the power out of the magnetron at those microwave frequencies by a factor of, oh, a thousand. This is the one thing that the Germans, who were doing the same kind of research, never found out. They stopped their research in this microwave area. So that's one of the reasons we have the great advantage over both the Germans and the Japanese.

The people are--they made the laboratory. The director was Lee DuBridge, who was a professor from University of Rochester, physics, well known for books that he wrote: a Physics Society sponsored series of books on physics. His associate director was F. W. Loomis. Lee DuBridge was Mr. Outside: a suave, worldly man, well spoken, handsome, gregarious. Just would come right up and shake your hand. And so you just met Lee DuBridge just automatically, everywhere.

F. Wheeler Loomis was a grizzled-looking New Englander type, but he was from Indiana, probably a good Midwestern type. He had white fringes of hair on his head, which was rapidly balding, and he had a very stern visage. He would be the Mr. Inside man who administered. Free-Wheeling Loomis was his nickname, from his initials, F. W. He really encouraged everything. He and Lee just--everything you wanted to do, "Great!" That was it!

There was a period there that I wanted to get out of the laboratory. I felt that I wasn't doing enough for the war effort, and I thought that I should volunteer for one of the military forces, since there was a constant contact with the navy and so on and since I had at one time thought of going to Annapolis, when I was young. So F. Wheeler Loomis gave me his speech. It was the speech that he gave to many other people, young people like me. It was called the Masses of Manpower speech, which is the way you get something done, the way you win a war is that you need masses of manpower to do something. And you're just going to go out there and fritter away your life doing nothing with some big organization because they're not ready to use you, where here you are doing fantastic work, and so on and so on, you know. So he kind of combined shaming you and praising you [laughs]. You stayed [laughs].

One of the other persons who I saw last at the fiftieth anniversary of the laboratory, in which we received that *Five Year* volume--roughly '40 to '90--so anyway, the man's name is Purcell. He's a major character in this other book because Purcell later, after the laboratory, went to Harvard and worked there in development of their cyclotron, and then he started using instrumentation that had been developed at the Rad Lab and he won a Nobel Prize. The lab always is proud of how many people on their staff eventually won Nobel Prizes. McMillan, for example, here at Berkeley, and Luis Alvarez here at Berkeley were at the laboratory. And Purcell and others. It just goes on and on.

Purcell and I were look-alikes. He was about six foot four, and so was I. And we were both slender, and we both had a big mass of blondish hair, which was kind of not well combed. People would go down the hallway of one of these temporary buildings and slap you on the back and say, "Hey, you've got a great idea!" I'd turn around and say, "But my name is not Purcell." [laughs] We used to joke about it because there were so many ways that people made mistakes with the two of us.

And we were quite the opposite. He was a very finely-trained, fantastically able theoretical and experimental physicist, and I was [chuckles] a mechanical engineer, so we were quite different.

### I. I. Rabi

Maslach: I want to throw in a kind of little humorous story, which kind of gives a little history, too, and also involves a Nobel Prize winner. His name is I. I. Rabi. Came from Columbia University, and he was head of the theory group. He had an office right next door to Lee Haworth, who was division leader of Division Six. These people were located in Building 24, up about the third or fourth floor. One day I was called to Haworth's office because one of the draftsmen I had, fairly young, was in danger of being drafted, and the question was to what extent do we go to the bat and try to keep him because drafting help was difficult to argue for compared to a physicist or an engineer.

So I arrived up there, the office, and talked to Lee Haworth, who later went on to head up one of the big laboratories in the Atomic Energy Commission. Anyway, the problem was complicated by the fact that one of Haworth's secretaries was the girlfriend of my draftsman [chuckles], so if we lost him, we lost

her, you know. And in many respects, she was more valuable than he was [chuckles], so the discussion was kind of strange. We were in this office, and we were crouched over in the corner, as far away from the office door as we could be, so they couldn't overhear us outside.

And we were discussing this strange problem of what to do with the draft board. Now, it didn't last very long because we were interrupted by all kinds of noise outside, in the hallways and everywhere. Suddenly, there's a knock and the door opens, and Haworth's private secretary came in. A wonderful woman. And she just said, "THE WAR IS OVER!" The war is over! Well, that was the day that Germany capitulated. Of course, it was a fantastic achievement, of course. Historical. So we were just dancing around there, and just talking to each other, slapping each other on the back and so on.

Lee Haworth was a chain smoker, and the entire time we were there he was using one of these little machines and you put a piece of cigarette paper down and fill it with tobacco, and it rolls it, you know, and it automatically made it a kind of a bum's cigarette, you know. So we were watching him while we were talking.

People were leaving and coming in and so on, and Lee opened the door, which went sideways to the next office. Knocked on the door first and then he just opened the door. It was I. I. Rabi's office. Rabi was in there. He was a very quiet man, except at parties. He was a great party giver. And he's very quiet and scholarly. So he was there with a visitor, and they were talking. The visitor had to leave right away when he heard this news. Rabi was sitting there [chuckles]. An oasis of quiet in this building which was going crazy.

I just looked at him. We had met socially a couple of times, seminars and so on. I said, "What are you going to do when the lab is over?" He said, "I was thinking just exactly the same thing. What am I going to do? Well, I'll go back to my laboratory at Columbia. I'll open my notebook and read the last sentence that I wrote." That man did that. And within a year won the Nobel Prize.

So what an experience for this young engineer! This great laboratory, meeting the man that two years later is going to have a Nobel Prize in physics. Nothing to do with what he had been doing at the laboratory.

Swent: Picked up and went on.

Maslach: He just picked up and went on. I ran into him a couple of times here and there. He was at various meetings in Washington, D.C., and we always kind of reminisced. I kept up contact with Lee DuBridge. He asked me--

Swent: Did he go to Caltech?

Maslach: He went to Caltech, where he was president for a long period of time, then he became science advisor to [President Richard M.] Nixon. During that time, which will come out later, I was asked to take a major job in Washington, so I was talking to him quite a bit. He was using me, too, on committees for the science advisor. So we were in contact. Last time I saw him was here at the Faculty Club. Everybody was kind of surprised. He came over to me, and we embraced and shook hands and so on. He died a few years ago, a very, very sad death, to me, because he was truly a major, major figure. He combined everything. He was a renaissance man. He was a scientist; he was a writer; he was an administrator; he was a politician; he was everything.

##

Maslach: He just worked with the Kennedys after Wiesner was science advisor to the Kennedys. I'm mixing that up. But anyway, he just was a perfect gentleman. And he was so polished. Just right for any kind of--he could walk into any organization, any room, and the room was brighter. And he could talk with anybody.

Incidentally, there's another Loomis in this book, both books, that should not be confused with F. Wheeler Loomis, who was associate director. But there's an Alfred Loomis, who was a very prominent lawyer, amateur scientist, gifted amateur scientist, I should say, and very wealthy and very political. He was close to the Roosevelts when the NDRC was formed, the National Defense Research Council. They were, of course, our bosses. The Rad Lab was one of the divisions of the NDRC. Alfred Loomis, of course, visited every once in a while. But Alfred Loomis and Lee DuBridge, as outside-men type, had great influence on Roosevelt and others in this whole thing.

#### Help from Vannevar Bush

Maslach: Another person I met there just by chance--and he helped me in a very strange way--was Vannevar Bush, who was the head of--his name is in that book--he was an MIT man, a craggy New Englander, tall, and quiet type. He was the head of the NDRC. One day at



MIT there, in a seminar, I was talking about the difficulty of getting certain kinds of precision instrumentation work done, that all of the shops I could go to--and I was going to shops in the Berkshires, in Worcester, and anywhere--and so Bush heard this and he just said to me--I remember he grabbed my arm and pulled me over to the side. He said, "I have a shop that I use but I haven't been using it much down on Cape Cod." Off the main area. This is an instrumentation shop. He said, "I'd be very happy if you would send work to them because they're so far out and away that nobody knows about them, but they're very, very good people."

He gave me the name, and so I contacted them by telephone and explained how I knew their name and so on, and I took the train one day down to Hyannis and got off there at Hyannis, and they picked me up in a beat-up little old car [chuckles], and then we went off to some road way out in the woods, the pine woods of Cape Cod [chuckles], and then they got this big barn building and houses. It was a couple of brothers, and they had this little shop.

The shop was absolutely an amazing place. It had instrumentation and machine tool equipment for making, like, watches and things like that. And they had designed the instrumentation, the lathes and so on that were hand-made by them. And these were now being used to make instruments. And, yes, they could do certain work, but they could only do work which was quite small, you know. That's very unique. And that's what I wanted.

I gave them some blueprints of some things and asked them, you know, "Is this the sort of thing you can handle?" And they went over things very conscientiously. They really put time in on the drawings. So I would be sitting there waiting [chuckles], and we'd think about lunch. I had to make a train schedule because there was only a couple of trains a day went to Hyannis from Boston. So I used them for a variety of work. One year I remember getting a Christmas card from Bush, thanking me for the work that I had sent to them. Obviously, they were very close to the Bush family.

Just so many strange things that were happening. For example, I needed to have slip rings--these are rings that are copper or in my case they had to be silver, which are on a rotating device which, of course, the radar antenna was. And then you would have to have silver-carbon contact points on the stationary side. So here's something rotating, going by, you know, a contact point and transmitting electrical information back to a stationary position.

We tried copper and all kinds of forms of other material--aluminum and a variety of things. It was obvious that silver was the thing, and so I just one day picked up the phone and started looking for silver. Well, there were silversmiths. New England is just filled with silversmiths [chuckles]. I finally found manufacturing and industrial silversmiths. I think the name was Treat, Shreve, and Lowe.

Swent: Shreve, Crump, and Lowe, maybe?

Maslach: They had a store right down on the Arlington and Boylston. I always remember because Doris and I bought things there. Anyway, it was the Shreve's of Boston. So I picked up the phone and called the number, and I got some corporate office, and I explained where I was and what I wanted to get done. "Oh, yes. We do things like that." And then they put me in touch with the person I should contact, which was down there in South Boston, where they did manufacturing work, including cutlery and all kinds of other things. Paul Revere would have been right at home there, you know [chuckles].

So I got a car out of the car pool and drove over there because it was a horrible place to get to. I just bought lots of silver [chuckles] from Shreve Treat and Lowe--I mean--

Swent: There was a Shreve, Crump, and Lowe, I remember.

Maslach: In Boston? You've got the right name. There's another silver organization that had--

Swent: It might have been Shreve also.

Maslach: I had so much work that I had other organizations, and I would just stumble into these things, you know. I really had a wonderful relationship with that silver man. He thought I was the greatest. Because I was a Californian, you know? Outgoing, gregarious [chuckles] type, you know. I was too gregarious, of course, because I had a shop out in South Boston that did sheet metal work. Beautiful, beautiful sheet metal work. It was entirely populated by Welshmen. The foreman was a Welshman with a thick accent.

He educated me in how to use the telephone. I had been months, you know, racing around, doing all these things and all these projects. One day, I was calling him, I had a special idea of something, and I wanted to know if it could be made. I didn't know enough about sheet metal work, and this was shaping tubes into circular and/or other strange kinds of shapes for structural elements. I just called him up, and I recognized his voice, and

I just started talking. "I have this idea," you know. I just went on and on and on.

All of a sudden, I stopped for a breath or something, and he on the other end of the line said, "And who is this calling?" In this wonderful Welsh tone. "What do you want to talk about?" And "who do you want to talk to?" My comeuppance. So I apologized [chuckles]. I told him [knocking on the table to emphasize the points] exactly who I was, where I was calling from, what I wanted to talk about, and so on. I just relaxed. Because he worked at that speed and not my speed. This was his way of being polite. So I always remembered that. He was so wonderful.

To this day, I can still remember. And when I answer the phone, after "hello" I just say who I am, like the British system, "Maslach here." You just identify yourself. And when I call--I used to make all my telephone calls--dean, provost, every time I would make my own calls, and I would always start off with who I was, where I was, and what I was calling about.

And he's the one that taught me that.

#### Marriage to Doris Cuneo, March 1943

Swent: Good idea.

Maslach: So it was quite a year or two. We got married in 1943, March. Doris came. Fran Hagerty picked her up at the airport and brought her to the Ritz-Carlton Hotel, where Doris and I met for the first time in nine, ten months. She was fresh out of California, March, first of March.

Swent: Had she graduated from the university?

Maslach: She had already graduated. She, in fact, graduated in '41, but she was teaching, and she had her school contract and so on. So she came from her teaching duties. She had gotten out of the last semester of it. And came. We had sherry on the balcony of the Ritz-Carlton Hotel in Boston, looking out over the Public Gardens [chuckles]. Fran was a great person to do that.

In the meantime, of course, as I told you, Elizabeth, Libby Blaney, was taking over and planning our wedding and where it was to be. She was so concerned that this woman had come to be married in Boston and she came all alone, and without her mother [laughs]. So Libby had Doris stay with her up on Beacon Hill.

She had a beautiful bedroom, with all these antiques and what have you. And so she stayed a week there before we actually got married.

She [Blaney] provided not only the minister who came up from Cape Cod but she, with Doris, discussed where to have the wedding. We had I think a Unitarian minister in a congregational church, which was the New Old South Church, on the Copley Square.

Library on one side and the famous church, Episcopal church, on the third side, and then all these commercial establishments on the other side, on the fourth side. So we found--Doris found a small chapel called the Children's Chapel. It seats only about twenty-four people, which was about the number of people that we would have [chuckles]. We didn't want to have one of these enormous churches with this long corridor to walk down.

Besides housing Doris, she gave Doris this beautiful piece of lace, antique lace, which Doris used as a shawl. It was just beautiful during the wedding. So we had this wedding with all of our California barbarians and a bunch of the New England people that we had met; also some people Libby knew. So we had the place filled, in total, with twenty-four people, you know. [chuckles]

#### Blaney Family Hospitality for the Reception and Honeymoon

Maslach: We had the reception, of course, on Louisburg Square in one of the Blaney houses. In fact, both of the Blaney houses were open. Beautiful reception. All picked up by the Blaneys. As Libby one time told me, she made less money as a draftsman full-time, forty-four hours a week at MIT than she paid the man who came to light the gas light outside of her house on Louisburg Square. Of course, the Blaney family had been there for a century. A couple of centuries, I should say. They were very well known to everybody.

The man who had a horse and buggy on Louisburg Square used to park it right in front of the Blaney house, which they gave him the permission to do so. He was very happy because it was a prime location, right there with the lantern and so on. He eventually became the owner of and operator of the biggest car rental and livery, limousine service in Boston. When he heard that Libby was going to be the maid of honor, he put on his uniform and he drove the limousine [chuckles] with Libby and

Doris to the church. So it was just amazing what we had at the church.

The reception, of course, was great. One of the pictures I showed you of the wedding party--in the background was all this beautiful Steuben glassware--an antique, matched set. One of my barbarians, Art Hughes, tossed a bag of confetti up onto this mantelpiece and hit one of these things and was rocking it. It could have fallen and smashed. Doris just about fainted [laughs].

At that point, when the reception was over, the wedding party took off. It consisted of Captain George and his wife Millie, who were our servants, two of the many servants the Blaneys had. They were driving the car, during wartime, down to Weston, and we spent our honeymoon for a week down in this beautiful Blaney house, historic house on Weston Road. So we had two servants tending to us. The house was fabulous. We would be in this dining room. Every morning there would be a fire in the fireplace. Breakfast was fantastic, of course.

Millie was a great cook. And Captain George was a seaman. He ran the boats up at Bar Harbor, and they actually lived up in Maine. But Libby had brought them down for the express purpose of having them take care of us down at Weston [chuckles].

Swent: How wonderful!

Maslach: So that was in March. We kept seeing the Blaneys all the time, inviting us to such things as Thanksgiving dinner, which is very big in New England. We would eat in the Blaney house, and Dwight Blaney would be the head of the table, and you'd have maybe ten, twelve people. Dwight Blaney just loved to take women like you and harass them until they cried. He really was a vicious man in that respect. He must have hated women in general. He was quite a character. As I said, a well-known artist and so on.

He and I got along very well because he kind of gave me a nasty little remark the first time we met, about ten minutes after we had met, I just gave it back, the same kind of remark. In other words, I didn't stand for his nastiness, and he knew it, and so when I returned the "compliment" to him, we were the best of friends. From then on, he and I--I couldn't do anything wrong. I would always leave little gifts for him. They invited us. We would always bring over something that he drank. He was an alcoholic of a world class. So he loved certain kinds of Scotch which you could get at S. S. Pierce, the gourmet food store.

But I would go to little liquor stores up in, say, the north of Boston, which was the Italian section, around North Station. And you would go in these liquor stores and look around, and you could find vermouth, which he liked, Rossi vermouth. Martini and Rossi. And I would get that and stash it away, and then I would get pinch-bottle Scotch, which he liked. He had a table right near the entrance to the house, one of the houses, and he kept his hat there. Never, never really went out, at his age. But I would always leave a note with a bottle there or something [chuckles]. I would have books that I had seen which I knew would intrigue him, and so on. But he and I got along very, very well.

Swent: How did he treat Doris?

Maslach: Doris he treated well because, I think, in part of his friendship with me, but she did not sit next to him [chuckles]. She would sit down the table--[chuckling]. One of the women that they would ask in--she knew how to handle him. She would just brush him off, you know [laughs]. But he was quite a character. There was just no question about it.

We were invited to go up to their island, Ironbound, in Bar Harbor, Maine. Ironbound Island. And we were to be driven up by one of his relatives. The relative was an executive of the shoe company which was a major company up in Lynn, that area, near Boston. And so they met us at the train and took us to their house. Early next morning, we climbed [in]to their Ford and we drove all the way up to Bar Harbor, Maine.

But not without a case of Glengarry Scotch, which I picked up at S. S. Pierce. We had received a letter from Dwight Blaney, to pick up the case at a certain time, and I went there and they said, "Oh, yes." Here was this case wrapped in newspaper, beautifully tied with heavy string and a handle, because a case of Scotch is pretty heavy. And so I took this thing up. I didn't even have to sign anything. Just went out, you know. So I took this with us, of course.

We got to Bar Harbor, and Captain George was there with this boat, and they took us over to the island. I made a kind of a boo-boo there, but nothing happened. In Maine, liquor is sold only in state-owned shops, and so here I was with a case of Scotch which--people couldn't tell it was Scotch because it was wrapped, but I had other bottles which were out in the open [laughs], but no one said anything, and I don't know how they police this up there anyway.

So we got over to the island, and there was a long walkway from the harbor up to where the main house is. A hundred and fifty feet up in elevation. And enormous, beautiful house. Big veranda around it, and it could sleep a dozen guests. Big kitchen and so on. He had a studio, artist's studio, off to the side.

Captain George stopped at a spot on the road. We were walking, and he stopped and he said, "You can walk from here right through the grass." There's a big lawn, and there, up on the veranda, was Dwight and Libby and so on. So I said, "Just a minute." And I went to this little Ford truck that he had, and I picked up the case of Scotch and put it on my shoulder, and I went--Doris and these other people, the relatives, across the grass where the people were sitting. I just came up the steps and "Mr. Blaney, here you are." [chuckles] And I put down the case of Scotch at his feet.

And his eyes just lit up, and he shook my hand, and he said, "Come with me." And he ignored everybody else. And we went into his bedroom, which was on the first floor of this two-story building, and he closed the door, and he and I were in there for about half an hour, drinking warm Scotch with warm mineral water. [laughs] It was the worst--no ice cubes! This was the way he drank it. I suffered through that. But they had put a sailboat in for Doris and me to sail. And we went fishing, and we went on a clam bake. We went picking wild raspberries on Slave Island and so on. The clam bake you couldn't believe. Lobsters they had right there, you know? And potatoes, corn on the cob, and beer, Schlitz beer. I remember that photograph of one of the guys drinking the beer and eating the lobster [chuckles].

So we had a week of just an amazing New England vacation, with all of these servants. We had a cook who was Irish and was convinced that I had dropped the "ski" off my name, which is something that was done, you know, so she would always call me Mr. Maslachski. [laughter]

First we lived on Joy Street, which is on Beacon Hill, right behind the Joy Street Playhouse, in one of the oldest houses in Boston, a wooden house which was quite cold in the wintertime. Had fireplaces and so on. The heat was on for an hour or so in the morning, then a couple of hours in the evening. Just down the street was the Joy Street police station, and go in the other direction a couple of blocks, why, there was the statehouse.

Joy Street, as you might imagine, was the prostitution section of old Boston. Joy Street provided joy. Right down the end of the street, around the corner, was the burlesque house,

the Old Howard, which was a famous burlesque house in Boston. One of the famous women that was there for many, many years: Tessie the Tassle Tosser. She had more tassles whirling in the air than you can believe.

So this is where we lived. On every weekend--Fridays, Saturdays, Sundays--they would have a play in the old Joy Street Playhouse, and we of course would always hear the people during intermission because they had a beautiful little courtyard that they could walk into. We were probably trying to sleep. Our bedroom was on that courtyard. But they had one of these old thrillers with the villain and the heroine and the hero, and there was a pistol shot which was always near the end of the play [chuckles]. We would always hear that pistol shot.

We lived there for about a year. The rats were so bad-- Boston is filled with rats. We moved to an apartment on Hereford Street, which is much closer for me to walk to MIT. We lived there for the last couple of years. It was the place where we met a whole new group of people. Downstairs was living Tuddy and Roy McKie. He became a famous commercial artist. "Never underestimate the power of a woman." He had these cartoon-type ads that he did for *The New Yorker* and all kinds of other--he later was with N. W. Ayer, big commercial advertisement agency in Philadelphia.

They were just some out-of-school-type people, you know? They had a wonderful child, and they later had a second child. Doris and Tuddy were pregnant at the same time. The second one for Tuddy, the first one for Doris. That was Christina, who later became a professor here at Berkeley. But they were just a wonderful young couple.

### Sightseeing by Bicycle around Boston

Maslach: Doris and I by this time had bought bikes, and we were biking all over New England. You had to bike to get to Lexington and Concord and those areas, and so we would go up there to Hartwell Farm, a famous restaurant where--the farm was where Paul Revere was captured by the British and later that night escaped when he made his famous ride to Concord. He never got to Concord. The other man got to Concord. Paul Revere got to the important place, which was Lexington, where he advised the important people at the inn what was happening. Concord, of course, is where the battle started.



We would walk and bike down the road from Concord to Lexington, which was my favorite walking area because in those days there would just be little wooden plaques. There was one place there was a big wood fence, and inscribed in the bar of wood was "Beyond this bar lie twelve British dead. Two officers and ten" you know. And "casualties of the Battle of" the knoll that was there. And then you climb up on the knoll and you find more evidence. So you just walked down this wonderful museum, all the way to Lexington.

Today it's just an enormous long park, and it has lost all of its character because everything is sort of updated for the masses of tourists. Lots of parking lots and things. They rebuilt the burned-down farmhouse, which was a great restaurant serving "chicken in all its varieties." Hartwell Farm. Big jars of jam, home-made and so on. We would go up there for Sunday--for lunch. It was fabulous.

Of course, you would go to the pond [Walden Pond], you know, and see where [Henry David] Thoreau used to stay. You would also go to the bridge, always go to the bridge, to the houses nearby and look at them. Also you could take the bike to North Station, show them your ticket, put the bike in the baggage car. Then, when you got off at Salem you just went and got your bike. So you would bike around Salem. The house with all the--

Swent: Gables?

Maslach: Gables. You know, seven gables. And the fabulous museum, the Peabody Museum, which is there. All great. And then all the historical homes that were there, the museums. And then you could bike from Salem down to Marblehead. Then you would have lunch at Marblehead.

##

Swent: So you were biking down to Salem and Marblehead.

Maslach: We had all kinds of favorite places that we would bike to. Those were obvious places, close in to Boston. We would go and visit the Meyers. I think by this time--no, I'll take that back. We later visited them, but not with bicycles. They were in a town called Nahant. But we also would go to Rockport, which is a popular tourist area now, and Gloucester. The train would go all the way to Gloucester, and then you would get off with your bike and you would go through Gloucester and you would maybe visit Bear Neck on Gloucester and the artist colony, and then you would go around Cape Ann and end up at Rockport, have lunch there and explore around that old town, and then bike down through

Annisquam to Gloucester, where you caught the train again, go back home.

We even did this overnight by going on Saturday afternoon and visiting and staying in Gloucester, having a shore dinner, which you, of course, know--lobster and everything else.

Swent: You're making me hungry [chuckles].

Maslach: But I remember when we went one time. We got out of the bed and breakfast place where we were staying, and we went to a diner, which was down in the center of town, Sunday morning, early. And we walked into this diner, in which all the windows were steamed up. You know, cold air outside. And when we walked in, we were met by, oh, easily fifty or more Portuguese fishermen, who were dressed up in their Sunday finery, which were these incredible plaid suits, very small pattern, very flashy. And they wore derby hats, and they were brown derbies. They were, you know, the best--they were just amazing, when you walked in.

And when we walked in and they saw Doris, why four of them jumped out of one of the booths and we sat down and had our breakfast. And all around us, standing up and sitting down, of course, were all these men, talking in Portuguese. It was quite a scene. So we saw a part of Gloucester that we never expected [chuckles] to see. But we would also stay up there in Rockport because it was so scenic.

And then for a vacation one time we took the bikes on the train down to Cape Cod, and we biked around Cape Cod. Started at Hyannis, of course, and then went all the way out to Provincetown and all the way back down on the other side to Barnstable and all those other towns, and finally back to Boston.

Rather interesting: There was a hurricane coming up the coast from the Caribbean, and it was down below New York, but it was heading up Cape Cod way. So we were sitting there in Hyannis, and I said, "Why don't we just go home? Because the hurricane will hit near by. It might not hit here, but it will hit somewhere. It will be heavy rains, so it will be a mess." So we got the last train out of Hyannis that Sunday evening with our bikes and got home just as it started to rain. And slept right through the hurricane, which hit Cape Cod, incidentally, and did major damage. I think that was '44.

The next morning, we got up and we--"Hey, what a beautiful day." And it was. Clear as crystal and--so we biked up to Concord. And then we saw people in front of stores, one store, dumping ice cream, which was all liquid. We said, "What's going

on?" Well, there was no power on. We didn't know. We were biking [chuckles]. And so the power was off, and so we couldn't eat at Hartwell Farm or any other place, and we had to bike somewhere down--we found some place where we could buy some food, and we made some sandwiches [chuckles]. But that was the great hurricane in '44.

The Manhattan Project and Declassifying the Rad Lab, August 1945

Maslach: The next thing I wanted to kind of tell you was when we finally learned that the atomic bomb was dropped--I should expand upon that because the Manhattan Project pulled about fifty to a hundred people out of the Radiation Laboratory. These were physicists, all of whom had knowledge of nuclear, atomic physics. Ken Bainbridge, for example, who put the last bomb--the last man to put the bomb together and set up the trigger and then walk off the tower there at Los Alamos--was a guy that I used to work with, talk to. In fact, he helped me in designing the first radar antenna [chuckles]. So, you know, these are famous figures.

Willie Higginbottom. All of a sudden, he disappeared. His address was a post office box, Santa Fe. All of these people, you know. We figured out what was going on because we knew their specialties. We knew about the atomic bomb program second-hand. But finally, when the atomic bomb was dropped, that signalled the end, and we had a big convocation called by Lee and others. It was in the big courtyard of MIT, in front of the big dome that faces the river. Here you had over five thousand people sitting on the grass, listening to Lee and a couple of speakers.

Swent: This is DuBridge.

Maslach: This is Lee DuBridge. So it was a very solemn day. We all were just sitting there--

Swent: How soon after was this?

Maslach: Well, [when] the war was over, we disbanded.

Swent: That was August of '45.

Maslach: Yes. And we just went, and it was over. It was amazing, just how fast it was demobilized. A lot of people were anxious to get back to their universities and university work. And there were a lot of people who were, you know, kind of wondering what the hell

they were going to do or were anxious to get started interviewing [chuckles] and so on. A lot of people just wanted to get home. A lot of people wanted to get moving on their research and so on. So everybody wanted to leave.

I was asked to stay at MIT at the laboratory there, which went into a new name. I was asked to take a Ph.D. there, but I decided that that was not for me. One of the funniest moments was when we demobilized the laboratory. All of us had file cabinets full of secret, classified reports. And this was just too much and too fast. So the librarian who was in charge of all of this and had all of the records just made a decision, which was a wonderful decision, and that was [chuckles] he set up big boxes in the hallways in these buildings, and you were on an honor system to take your classified material and dump them into these big boxes. You would wrap them up with a string or something and have a list of these reports, and you would sign off, and you would just dump them.

Well, of course, anybody who looked at these boxes--look at this report! All of a sudden, there would be all these reports which were being moved from hand to hand. They were kind of historical reports. A lot of it should be declassified and so on. But that's the way they handled the declassification of the laboratory [chuckles]. We just dumped everything [chuckles] that we had. It was an honor system approach to the whole thing.

It was a kind of a solemn ceremony because we were at, on the one hand, the end of the war; but on the other hand, we had all of these memories and all of these things that happened. Of course, the laboratory had gotten into being right on the front lines. They had--as you could see, they had a lab substation in Great Britain. They had one later in France, in Paris.

And friends of ours were over there and almost killed because they were dressed in khaki uniforms, just chinos and shirt. Had no identification. And one of my friends, Charlie West, was almost killed by an American squad as a spy because in the Battle of the Bulge, the Germans put on American uniforms and infiltrated the lines, and this was a real problem. So all of a sudden, this guy: "Who is he?" He spoke perfect English and so on, but they kept him in jail. And really, he was up to be killed. So this was a scary time.

Ernie Martinelli, who I mentioned earlier, had gone over to Great Britain and was at the lab there, and during a bombing raid, he went to the air raid shelter which, of course, was the subway, and there was a person who was also in the laboratory,

Betty, and they later got married [chuckles]. As we said, they said they met in an air raid shelter [chuckles] in London.

So all kinds of different things were happening. As I said, on the one hand I had this fantastic life with New England people--the Blaneys especially, but with also the people down at T Wharf, the Meyers. Doris was getting a master's degree in psychology. She had offered her services but found out that they would pay her less to work in a laboratory as a mathematician--that's what she had a degree in--and you would think they wanted her--they would pay her less than she was making when she was a saleslady in one of the stores in San Francisco. So she said what she would need in terms of moving and the times were very bad, very early in the morning, and to make dinner and so on, it was just--we would spend more money than she would be making. So she went and took a degree in child development, and she has quite a story to tell, of course.

Swent: Where did she do that?

Maslach: Well, there's a clinic in which she did most of the hands-on work, but Boston University was the university where she got the degree.

People--other people, for example, the Culiners that we still see often. We met in 1943 in Boston. He's a doctor. Helen was quite pregnant at the time we met her. She and her husband would be walking around Boston. But she was taking a degree in psychology, too. So that's how we met.

I, of course, was asked to go to work by a man by the name of Ray Garman, head of Group Sixty-Four. He and Marcel Droz, a Spanish man, later became director and associate director of General Precision Laboratory. This was set up in--Ah, I have got a block on the name. The county just north of New York City. Very expensive, ritzy county. Westchester.

But anyway, I think this is a good time to break because I want to do something here, and that is to get our schedule set and get the--

Swent: I just have one more question.

Maslach: Okay.

Swent: The group that you were with were trainers at MIT.

Maslach: That was Group 64.

Swent: Right.

Maslach: In several of those photographs, if you'll notice--

Swent: Yes, I looked at those. You were always the one in the middle because you were the tallest. [chuckles]

Maslach: Lee Haworth and I--because the division offices--he was my boss, ostensibly. I was kind of a sub-group, and so just to make it easy for the book and the photography, why, they had me with trainers because I did a lot of work with trainers, but they also had me with other groups where I did a lot of work.

Swent: I see. You were with the receiver group.

Maslach: Yes, yes. Indicators, yes, yes.

Swent: I see.

Maslach: So I put Doris on the train to get her to San Francisco, where Christina was born.

Swent: I see. Okay. All right. Well, I guess--shall we stop then?

Maslach: Yes, why don't we stop--



Duayne Gordon and George Maslach, University of California students in electrical and mechanical engineering, respectively, worked all summer of 1941 on the NBC Building, then returned to their studies.

*Photo by L. Romaine.*







Doris and George Maslach, New Old South Church Children's Chapel,  
Boston, Massachusetts, March 12, 1943.









Doris with Jamie, Steven, and Christina at Berkeley Friends meeting picnic, circa 1957.





George Maslach's sister Sophie; his mother, Anna; his wife, Doris; and father, Michael Maslach, 1957.







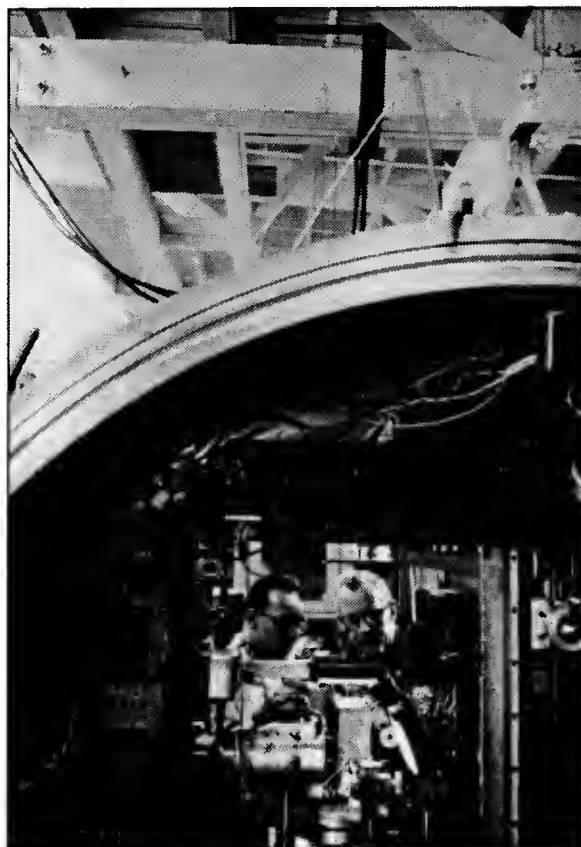
U.S. Department of Commerce Technical Advisory Board, Washington, D.C., circa 1965. George Maslach third from the left.

*Photo courtesy National Bureau of Standards.*





Professor of Aeronautical Engineering, George Maslach, in U.C. Berkeley wind tunnel.



With graduate student, Gene Moulic, 1965.





Academic Board of Advisors meetings: Professor George J. Maslach, Dean, College of Engineering, University of California; Rear Admiral D.L. Kauffman, Superintendent, U.S. Naval Academy; and Dr. H.E. Longenecker, President, Tulane University, 1967.

*Photo by F.G. Travis, PH2.*



## IV BUILDING UP A LABORATORY FOR GENERAL PRECISION LABORATORIES

[Interview 5: October 20, 1998] ##

Converting the Manville Estate into a Laboratory

Maslach: This was the most profound period of the war. We had gone through the ending of the war with Germany and, of course, we knew that the war with Japan would end soon. The atomic bombs had been dropped. We had been told that we were free to go ahead and do whatever--move ahead on the next step of our career.

There was an enormous ceremony in the main courtyard of MIT, in the region between the dome and the river. It's hard to believe, but they had about ten thousand people sitting on the grass there, with a podium. There were over five thousand staff members and about five thousand technicians. Lee DuBridge and others spoke, and that was the end of the Radiation Laboratory. Period. We were free to do what we would want to do.

Doris and I had already planned our life to a great extent. She was pregnant, and shortly thereafter she left by train to California, where Christina was delivered at the UC Medical Center in San Francisco. I had a free ticket back to California because that's where I was originally recruited, and under the terms of the contract they returned you to where you were recruited.

So I went out to San Francisco and looked at San Francisco. You must remember I was born and raised there. Immediately after the war, you could not see the growth potential that was going to occur. In fact, the whole Bay Area was dull compared to Boston, MIT, and the potential for a job down in New York.

So I came back to New York and took a job with General Precision Laboratories, a subsidiary of General Precision Equipment, which is best known for turning out practically one hundred percent of all motion picture theater equipment:

projectors, arc lamps, sound systems, everything that's needed to put on a motion picture show of 35-millimeter film. I was one of the first senior people that they appointed, but they also appointed, oh, about twenty people from MIT. Ray Garman, who was the head of the trainer group at MIT and who had me doing quite a bit of work, was the director of the laboratory, and Marcel Droz was the associate director. And I knew both of them very well.

So the next step was to build up a new laboratory. We went touring around in an automobile, around New York City, over in [New] Jersey and Long Island, looking at large mansions that were, of course, empty. We spotted a couple down in Long Island that looked reasonable. One of them later was taken over by another company. But the senior vice president of the corporation ruled out Long Island because of the traffic and transportation conditions of being on that island. Very wise move on his part. He sort of pointed us in the direction of the mainland, directly north of New York City.

And so we eventually ended up in Pleasantville, New York, which is usually best known as the home of the *Reader's Digest*. But practically all they had there is a big post office operation. Everything else is located elsewhere. But we bought the mansion of Hiram Manville of Manville asbestos products fame and uncle of Tommy Manville, who was best known for his marital affairs.

Seventy acres, of which thirty-five acres were lawn and housing and buildings and so on, including, of course, the main building. The problem was to convert the main building into a research laboratory, which in itself was not too difficult. I was asked to supervise all the construction relationships with the contractors. And so we did the main building pretty quickly, largely a problem of increasing electrical power.

But it was really odd to be in a big mansion like that because you walk in the main entrance, and you're in a Gothic-cathedral type room, soaring thirty feet, with beautiful stonework and so on.

Swent: Quite a contrast from MIT!

Maslach: Yes. It was not spartan. They had a large stable about, oh, a hundred and fifty yards away from the main building, and the architects were able to design an apartment house for people there because living quarters in Pleasantville, Chappaqua, and other places near by were not that plentiful. So I worked with the architects and the builders there, and we ended up with fourteen apartments. I wish we could have saved and used some of



the old horse stalls because the wood was absolutely fabulous, varnished, and the center oak, center part of the stables, just absolutely modern and also beautiful. You could live there, really. Those horses had a wonderful spot. So anyway, we built up that.

#### A Startup Problem, Similar to that at MIT

Swent: How did this relate to anything you had done at MIT?

Maslach: It was a startup problem. Everybody was doing anything that was necessary to get moving. And in many respects it was like MIT. We were starting from scratch, and we need to do this, we need to do that, and you just did it. You were ordering different materials and items, and you just--whatever was necessary, you did it. And it was amazing. Everybody chipped in and did their work.

Anyway, this laboratory developed very rapidly. We had a number of contracts from the armed forces and other agencies in the federal government. Some of the people just continued doing what they were doing and had been doing at MIT because there was a lot of radar development in our contracts. I, in fact, turned out a trainer, totally mechanical.

Swent: A trainer for what?

Maslach: Well, basically, you simulated a flight of aircraft coming in from a direction, and you wanted to be able to move these airplanes at certain speeds, certain vectors, and you wanted them to maneuver in certain ways and so on.

#### Working on the Pioneer Fast Film Developing Unit

Swent: This has nothing to do with movie equipment, then?

Maslach: No, most of the work that we did in the beginning was radar oriented because this was essentially where most of the people came and that's what--the contracts we were getting. However, it was a commercial laboratory, and after I finished a major trainer job and also a major indicator, radar indicator job, I ended up doing something which was very unique. Television had come in, and the theaters wanted to be able to run live television,

essentially, into the theater. This gave them all kinds of new problems for the projectors and getting film and so on.

So I worked on a very fast film developing unit, which developed, dried, and had in archival form 35-mm film, in which we had taken photographs off the television tube, and then we were able in one minute, between the television on the tube and the film in the projector, have dry film projecting. So there was a one-minute delay, essentially. And that piece of equipment was recognized as a major change in photographic work.

And I find it humorous today. I'll have to show you the articles when the equipment was first produced, and today when you go into these photo shops which give you one-hour development, it's practically the same equipment. It's much less expensive and not as high priced in the sense of materials and so on, but basically it's the same. I mean, you put the pictures of the two pieces of equipment next to each other. You could see the genealogy [chuckles] of that equipment. So it's now being used, and they're producing it, mass producing it, as a fast-developing processor.

All of these jobs sort of had this funny history in that they keep coming back, and you see something--I told you earlier I can walk in airports and see beacons that I had designed. Well, now I don't see those any more because they have far better ones, more modern. But now I walk into a photo shop and I see the equipment that I designed for General Precision.

It was a good period of time. The amazing thing about General Precision Laboratory is that we all lived essentially on this estate. Well, not all, but a large portion of the senior people lived there, and we walked out of our condo-type apartments through the vegetable gardens, where we grew our own veggies, that used to be the vegetable gardens for the big house, through the formal garden, past the tennis court, past the swimming pool, into the main building, where we had our offices. It was just a wonderful [chuckles] environment.

You would go home for lunch, of course, and everybody saw each other. And in those families there were twelve children in twelve consecutive months. This was immediately postwar. The baby boomers were coming. And so we had not only Christina but--she was born before we got there--but then Jamie was born while we were there. We had parties constantly. Everybody talked. We were an enclave, and we were separate from the city. We were about a mile outside of the Pleasantville town center.

The first election was when [Henry] Wallace was running as a third-party candidate. And, of course, Norman Thomas was running. These were on the liberal side. And then you had [Thomas E.] Dewey and [Harry S.] Truman. This was the great election where Dewey thought he had won, and he had not. We had one man who gave a stirring speech on why you should vote for Norman Thomas, not waste your vote on Truman, who would lose. So all these people went to the polls, 100 percent voting.

Of course, we were a new element in town. So, like, fifty people all of a sudden voted. It's a heavy Republican area in New York. So the day after the election [chuckles], we went down and looked at the results of the town election [chuckles], and there would be Norman Thomas. Three or four people had voted [chuckles] for Norman Thomas; a couple had voted for Wallace; and all these people that voted for Truman. It was practically the only people on the left side of the balance; all the rest were Republican. I mean, it was almost 100 percent Republican in that area. So we were kind of looked at askance, you know, as the new people.

We were all sort of second generation away from our families. No one there was close to their families. People came from New Orleans, California, upper New England, some Midwest. They did not go back to their families for holidays, so we would always have big Thanksgiving and Christmas, New Year's type operations. It's just amazing how much fun we had there. It was like living in a country club. We had the tennis court to ourselves, and we ran matches. We had a ladder arrangement. It was pretty nice living because the thirty acres of lawn were constantly being mowed, and all these specimen trees and flowers outside your window [chuckles], so it was really living a plush life.

Swent: What was it like to be living and working with the same people?

Maslach: Well, we actually got along quite well. The mechanical engineering group was small. There was a man by the name of Karelitz who came from MIT. He was famous for work on the Mt. Palomar telescope. And another fellow by the name of Frank Dibble, who was my age, who had graduated from MIT. And there was one or two others; and that was it. So it was small groups. Again, it was the same type of thing. You had the ability to kind of pick your projects and work where you wanted to work. You developed groups that were project oriented, so it followed the MIT model, but being much smaller. We had eventually about a hundred scientists there. So it was a lot of fun.

However, I was at the same time being asked by the University of California to come back here to Berkeley and to teach or to do research or so on. The primary person who contacted me was Carl Vogt, a legendary figure in mechanical engineering, essentially an automotive and internal combustion engine research man. He had a wonderful sense of humor. But he was chairman at one point, and I remember he kept sending me telegrams. I would go down to the national conventions of the ASME [American Society for Mechanical Engineering], and I would meet him there and stuff like that. I kept putting him off, putting him off.

Then I decided that that banker on that train coming down the Mohawk Trail when I first came to Boston was absolutely right. I wanted to go back to California [chuckles]. So we came back in 1949.

#### Return to San Francisco, 1949

Swent: You were there four years, then.

Maslach: Yes. What we did was to buy a Studebaker, which managed to get us all the way to California. It had a very small-diameter clutch. The clutch was a weak part of that design. But we put the kids in the back seat, built up the back seat with suitcases and so on, and just drove. You know, we shipped all of our furniture and so on. We had a wonderful time driving through Lincoln country and then up to Michigan and Wisconsin area. All of the high points that you would go across country. We went to Glacier Park, Yellowstone, and headed up to northern California. Actually, we came in on Oregon to the coast, and then we came into California.

This was a major change for us because we were coming back to family, and we were in our home ground. We stayed in a house for years, two years, that belonged to Doris's family. It was up there near the top of Telegraph Hill. Her family--

Swent: In San Francisco.

Maslach: In San Francisco. Her family went back generations to 1854. At one point, Billie Cuneo, old--grandfather, I guess, of Doris's, could have bought the entire top of Telegraph Hill. But he had enough property up there, so they had houses. We got one of them.

I came over to the East Bay, not directly to Berkeley and UC Berkeley because I had another rather gaudy offer, a high-priced company in the East Bay. They were on the verge of quite an expansion. At least they thought they were.

Swent: Would you name the company?

Maslach: No, I don't think I should name the company because it is a company that's still in existence.

Swent: Okay.

Maslach: I'm not saying anything bad about the company, really, but it was basically working in hydraulics, mechanical design. I went to interview with them, and they were happy to see me and have me and so on, and they made me an offer. Within one week, a major contract which they had expected to get from the federal government fell through, so [chuckles] last hired-first fired, essentially. I never drew a paycheck with them. But I was let go immediately.



V     RESEARCH ENGINEER AT UNIVERSITY OF CALIFORNIA, BERKELEY,  
1949

A Remarkable Change from New York

Maslach: I drove from there to UC Berkeley and dropped in to see Carl Vogt [chuckles]. He was no longer chairman. R. G. Folsom was the chairman. He was a fluid mechanics, heat transfer man, mainly fluid mechanics. He was a big fellow. He was an All-American football player at Caltech, All-American for their level of football. He was a lineman. He was just a big, rugged guy.

He later went on from Berkeley to become research director at University of Michigan and then later president of Rensselaer Polytechnic Institute in upstate New York. He had quite a good career. He was a close associate of "Mike" [Professor Morrough] O'Brien because they both were essentially in the same field, although Mike was in civil engineering, while Folsom was in mechanical engineering.

So I got my first glimpse of UC Berkeley and what might be possible as a new career. I must say it was something that I never really expected. While they were talking teaching, they also had a lot of work in research, so I was introduced to Enos Kane, who later became one of the vice presidents of Standard Oil and who did his Ph.D. thesis in the low-density facility, using the wind tunnel to measure forces on spheres. That would be the spheres traveling in the upper atmosphere, thirty to fifty miles up.

So this was 1949 when the equipment was being built, 1950. You know, doing research and finishing equipment, building new instrumentation and so on. It was just a remarkable change because I took the job, even though it was about a 30 percent cut in pay from New York, but I figured that the cost of living here would be less at that time. We had a break on our living facilities, so I went ahead.

Swent: Would you care to say how much you were paid?

Maslach: It was about seven hundred dollars a month, six hundred, seven hundred a month.

Swent: What sort of benefits were there then?

Maslach: Well, you of course had the pension plan right from the very beginning. And you had Kaiser Permanente or other health services. You did not have dental, but you had Kaiser. I've been a member of Kaiser since 1950! I also took the PERS, which is the Public Employees Retirement System statewide, because the Regents' retirement system did not have a good reputation. It had almost gone bankrupt a few years earlier. It was saved by the Regents who put money into it, money which was available to them, not from the budget.

So anyway, I started in doing research on the low-density or upper-atmosphere research project. It was located in College Avenue Pool, which is where the architecture, city regional planning, and landscape architecture building is now, Wurster Hall. The pool was the last surviving bit of the Phoebe Apperson Hearst Gymnasium for Women. If you look at the old pictures, the old campus, this was a wooden Gothic structure, very tall, beautiful, wooden architecture.

One of the things, of course, in it was a swimming pool. One pool was left there, and the engineering department was using it as a small field station because we had a reservoir of water. Other pools nearby were constructed and used for wave research, ocean, beach erosion research and so on. And the development of landing craft during the war.

I had worked there as a student, and this was the original building still there. I walked back in 1950, seven years later. So it was like going back home in certain respects. The towing tank was there which I had worked on. The low-density wind tunnel was right next door and had been designed under the supervision of Enos Kane and with Don Horning as the engineer in the construction.

#### The First Research Contract, Experimenting on a Pitot Tube

Maslach: So I was asked to head up a \$20,000-a-year research program from NACA. Not NASA, but this was the forerunner of NASA, National



Aeronautics. This was before "Space" became an initial in the name of NASA.

Swent: What did "C" stand for?

Maslach: I'll have to think about it.

Swent: Well, we can find out.

Maslach: National Aeronautics something Agency, whatever it--

Anyway, the project was to determine what the readings were for what is called a pitot tube, which measures impact pressure as you're flying through the air. They're used on aircraft. If you know the static pressure on the aircraft, on the body, why, you can tell what your speed is. These two pressures will give you an indication of speed. Of course, what we discovered is that after you get high enough up in the atmosphere, the pitot tube doesn't work. We were able to demonstrate this in that contract and in other future contracts. It's a function of Reynold's number, basically, and that is a complicated, non-dimensional combination of several terms.

That was sort of our breakthrough, 1951, one of our first papers that came out that got a lot of publicity. Enos Kane's thesis on sphere drag was also a big breakthrough back in 1950. I should mention that his project was one of the larger projects sponsored by the ONR [Office of Naval Research]. The tunnels that were the big bulk of money came from the navy, the Office of Naval Research, ONR.

ONR had a very unique condition in which they would fund research over a period of years, something that they gained immediately after World War II, and they were the first agency to be able to carry out research like that. Separate, of course, from the Atomic Energy [Commission], which was a power unto itself.

So we had NACA and ONR money, and then we had later money from the Air Force, the equivalent of the ONR in the Air Force, which came later. We had a budget--in 1950--of about, oh, \$80,000 a year, which was big. And it went up from there.

#### Signatory on the First Basic Federal Research Contract

Swent: And it was entirely federal?

Maslach: All federal money. One of the unique things of humor that I found was that a couple of years later the University of California was singled out by the federal government as an organization to help hammer out a basic contract that could be used between universities and the federal government, any agency within the federal government. This was the basic ONR contract that was developed. I was on an ad hoc committee of people here in the university, and when they finally finished developing that contract (which didn't take long), they kind of looked around for people to sign the documents. Here at thirty years old, thirty-one maybe [chuckles], fairly new to the campus, I was a representative of the largest on-campus research project. And so I signed.

Even to this day, older people back in Washington, D.C., remember this and remember me. All of the rest of the signatories on that contract are dead. I'm the only one still living [chuckles]. And that was because I was so young! Unusual. But there was no real big research activity on the campus except for the Radiation Laboratory which, of course, at that time was off-campus. So I was a signatory to that first basic contract that was developed back there.

Anyway, after starting--

##

Maslach: Well, getting back to my first involvement, before we get into the larger picture, the first month I was heading up that NACA program, which was about \$20,000. Then, about a month later, a contract from the Air Force came in for development of what we called flow visualization processes. This was in addition to the ONR contract. So I was asked to head up that project, and I was given a raise in salary.

#### Heading Up the Contract with the Office of Naval Research

Maslach: About three months after I came here, Enos Kane had finished his Ph.D., and he was leaving. He had been heading up the ONR contract, so I was given the financial control of the ONR contract. I was essentially running the laboratory, in three months. And my pay was back to what I was getting back in New York City [chuckles]. It was really quite a change.

Swent: Were you doing any teaching as well?

Maslach: No, the teaching came later. I want to identify the key people who worked on that contract because many of them are still around. Enos Kane, of course, left, but he was one of the godfathers of the original activity. Dick Folsom died last year, unfortunately, living up in Napa Valley.

#### Sam Schaff, Key Theoretician

Maslach: And Sam Schaff, professor emeritus of mechanical engineering, was essentially the key research person in the sense of theoretical activity. I was sort of the mechanical engineer doing experimental-type work and developing experimental equipment, like a balance, which was very, very sensitive for measuring forces. Sam of course was the theoretician. He was well known here for years, teaching a graduate course in engineering mathematics, analytical mathematics. So these were the key people running the operation there.

After that we had people who have made a name for themselves since, and that would include Frank Hurlbut, mechanical engineering, retired; Rick Sherman, Frederick Sherman, also mechanical engineering, retired; and they had students who took their Ph.D. on that program and then stayed on. Rather rare at the University of California to hire people who got their own Ph.D. here.

#### Roxanne Anderson, Secretary and Olympic Champion

Maslach: But we had a wonderful operation there. The characters there were wonderful. My secretary at the beginning, Roxanne Anderson. She was a full-blooded Chippewa Indian who took a bronze medal in the 1936 Olympics held in Germany. She was voted by the American Olympic team (men, of course) as the most attractive female athlete. And she was. She was about five foot six, and she had this wonderful long black hair which she roped around on the top of her head. They were essentially long pigtails [chuckles]. She had a wonderful face. She had that complexion which you could tell that there was some color there, but you didn't know what. She sort of was the mother hen for the group. All these students and so on.

I always remember I challenged her to a race, sort of impromptu. I was coming one direction; she was coming another

direction to the lab, and I started running. She just pulled up her skirts and beat me so badly it was ridiculous. She could really run! The bronze medal was in the 100-meter low hurdles. And so she was an athlete! She went on for years here in the Bay Area, very active in the athletic, amateur athletic programs. She coached and recruited and so on. But she didn't have a permanent job coaching, but she really identified people. She was a wonderful, wonderful person.

The secretaries of any organization, of course, are very, very important. Rarely do people credit them with how much they contribute in non-traditional ways. They may have a technique of running things but not running things, you know. You always want to be on the right side of the secretaries of any organization. We had a series of young women, older women, who have just left their mark on all of that activity.

The research activity was moving very well. I had several papers out and did many reports within the operation. I had to make quarterly reports on every project, so I was getting into a lot of bureaucratic kind of activity and much less mechanical engineering and much less research.

Swent: How did you feel about this?

Maslach: Well, I had an offer from a company outside who knew me, and I almost took it. I came very close to taking it. I looked at it very carefully. But at that point--this was 1950, '52--we had moved over to Berkeley from San Francisco, where we only stayed for one year, in 1949 to '50. And I had purchased land up on Panoramic Way, and I built--'52 we built one rental unit; '54 we built the second; and '56 we built a house. But I was not tenured. I was a research engineer, and that has no potential for an academic appointment. I did not have an advanced degree, so I thought that in many respects I was sort of an oddball within the university environment, and I was much more suited for the commercial-industrial activity.

I don't know who talked me into staying. Clyde Garland, a professor who was chairman of one of the divisions of Mechanical Engineering, was probably as instrumental as anybody in talking me into teaching. Mechanical Engineering was not a single department at that point. It was really four separate units. One was heat transfer, fluid mechanics. One was engineering design. One was applied mechanics. There was a fourth one, which was just called mechanical engineering.

The thing that was a problem was that we had a lot of older people in some of the units and then in other units, say, heat

transfer and fluid mechanics there were quite a few young people. And also in engineering design. So we had sort of the young Turks and the old guard type of an arrangement. Throughout the entire college, there were changes going on. Major, major changes. Changes in attitude, perception. You know, what the field of engineering was going to develop into and so on.

#### Lecturer for Undergraduate Classes, 1952-1954

Swent: What were these changes? Could you be specific?

Maslach: Well, the first thing and the most obvious is that we had moved into graduate engineering instruction, with its component of research, whereas before overwhelmingly it was a bachelor's degree program. We had a small master's degree program and practically a non-existent doctoral program. Just to give you kind of perspective, in 1963, when I became dean, the number of Ph.D.s granted in engineering was around seven.

Swent: Per year.

Maslach: Pretty small. We're now up around two hundred. But in the master's degree program in, oh, 1952 it probably was maybe a hundred, and today it's five hundred. So this change was going on, and it was not erupting in any formal manner. We did not have any message from God as to what we should be doing. Everybody was kind of moving. New people were coming out of institutions back East, and Stanford and other places. And they all wanted to continue their research activities as well as teach.

So I was asked to teach by Clyne Garland. I remember meeting with him one evening. He said, "Well, why don't you just start teaching on the bottom and just go up the ladder?" Just teach a course in freshman, sophomore, junior year and so on. Actually, that didn't work out quite that way. The first course that I taught was a graduate seminar on vacuum systems design. I put out these wonderful notes and eventually put them into a book.

So I taught a graduate course first. That was really the easiest thing to teach when you're first teaching. In a sense, you're teaching what you're doing every day, you know, to people who were very knowledgeable. Teaching a freshman course is very, very difficult. You don't know how much time and effort goes into teaching freshman courses. Very, very difficult.

So after the graduate work, I started teaching at the very beginning, freshman year graphics, and I moved into dynamics and statics. And I went on to heat transfer, fluid mechanics, and also mechanical design. So I was just clicking off all these courses. I was teaching them a couple of times as I went up the ladder, teaching these various courses.

Swent: How did you feel about the teaching?

Maslach: I enjoy teaching, mainly because I'm a bit of a joker. I enjoy working with students, and I had a very simple way of teaching. There was a great amount of laughter, and very serious too. For example, the first lecture of any class, I would be very serious and tell them that "we are here, an elite group with high I.Q., and I know what mine is; you probably know what yours is. But I'll tell you right now there are people out in that audience there with I.Q.s higher than mine." ~

"Now, why am I teaching, and why aren't they up here teaching? The point is that I have experience on my side. I know, I've learned, I've had knowledge that I've learned, I know where to go to get knowledge to answer questions," and so on. "And I'll guarantee you that any question you ask me on this subject I'll be able to answer, either immediately or at the next lecture."

#### Having the Class Design the Tests

Maslach: I had a technique of having the class design the tests. For example, take the final, which carries the most weight of the tests. I would, in the last lecture, say, "Okay, let's design the final." And we would go over the entire course, kind of step by step: what were we trying to get across, what were we learning, you know, etc., what were the principles involved? You take any course. There's a limited number of principles in that course, and you want to be tested on those principles, so you want to have a problem that will test you here and one over here and one like this. Okay, there's the final. You're going to have a problem in this area, that area, that area, that area, okay? Then I would go home at night and lay out the problems. You know, design the problems.

Swent: That's a wonderful idea. I don't think I've ever heard of anybody doing that.

Maslach: Well, it's a very simple thing. It's just a summary of what we're trying to do and what we're going to now test it on. They all applauded, and had a lot of fun.

I was able to be very casual in my lectures. I'm pretty good at throwing a piece of chalk, a little piece. If somebody was talking and interrupted, I would fling a piece of chalk. I was very good. I could hit anybody in that classroom. And once I hit one guy on the head, and it bounced off onto the shoulder of the guy he was talking to. I thought that was pretty good. Two students in one throw.

Swent: What kind of students did you have?

Maslach: Well, at that time it was strictly male. I shouldn't quite say that. I remember a woman in a freshman graphics class. She didn't do very well, and she came to office hours and would talk to me. She had never had anything less than an A or a B in high school, and on her first quiz she got a D [chuckles], and so she was really, you know, thrown for a loss. So I finally got to talking to her about why was she taking engineering. Well, she was taking engineering because her boyfriend was an engineer. He was down in San Diego in an aircraft company. I thought that was not a good idea. But I didn't say so. But before the semester ended, her boyfriend dumped her. He found somebody down there, and that was the end of that romance.

I remember she came to office hours to talk about the final or something, and I said, "Are you going to stay in engineering?" She looked at me and said, "NO!" [laughs] And she ended up in philosophy. I remember seeing her on the campus a year or so later. She was so happy to see me and to tell me of her progress in an entirely different field. She was a good student. Lived up here in Albany, I think. She was quite a gal.

Swent: What age were the students?

Maslach: I would get people seventeen, eighteen years old and four years--

Swent: This was beyond the time when you were getting the G.I. Bill people.

Maslach: Oh, yes. See, '52. The big G.I. bulge came 1946 to '50. That was a real flush. I saw some of it, but I didn't have a lot of teaching in that area with those kinds of people. I saw them in graduate work, and there were people that stayed on.

Fun Teaching Mechanical Engineering Design 106

Maslach: But I had fun teaching all the basic courses of the freshman, sophomore year, and the junior year. Of course, my best recollection of teaching, where I could really impart more than the usual, was in mechanical design courses, senior courses. I remember teaching what was then called 106, which was a mechanical engineering design course. I put in all kinds of new problems. Old professors had just had the same problem every year. I would really foul things up by having all kinds of new problems. I'd even take problems--the wind tunnel--you know, the design of equipment. "Now, if you guys really want to see something, go and look at the wind tunnel. You're free to go over there. And this is what I want to do, and you're going to design it."

So this brought kind of a graduate activity down into the junior, senior year. I was very successful with that technique. I had a lot of people who were very creative and liked to work on something real, rather than something that's theoretical and abstract.

Swent: Were there texts already developed, or did you do your own texts?

Maslach: We had texts on everything, but in mechanical design, in the period that I was teaching, I must say the textbooks were quite poor. They were old-fashioned. They were prewar textbooks, basically brought up to date a little. For example, one day I gave a problem on vibrations. It was a classical way to solve this problem, using classical techniques. One of the students--this was in the fifties--submitted one sheet and the problem was solved. Usually, the classical technique, you would have several sheets of paper to solve that one problem. I couldn't believe it. I looked at it and looked at it. And this kid was so smart and so forward-looking. Got an A+ on that one, for sure. He had used a computer. This was early fifties. I was using an old-type computer on the wind tunnel, but for this kid to get hold of some computational system and use a computer, I don't know how he did it. But he did it. And it was perfect.

One of the things I would do--he's a good example--I would ask people to come to my office hours. I would invite them. Office hours are the least used resource of teaching at the university. You would have maybe three or four hours, office hours, during the week, and you might be lecturing in one course three hours a week, another course in the laboratory or something, you know, four or five hours. But nobody comes to the office hours. And there you're one on one. In a lecture, you



might be thirty or sixty to one, students to faculty. You can't get a question in a class like that. Even if you divided--had so much question time per hour, you add it up for the whole year, a couple of office hour meetings would be equivalent of asking those questions.

I was so irritated--frustrated, I guess, is the proper word --that I would at the beginning require people who were getting Ds and Fs to come to office hours. I would just schedule them. I said, "Come in and schedule this hour." That worked out quite well. It's amazing how well we could bring people up with just a couple of hours of tutoring, essentially.

There were people who, you know, just did not know how to take examinations. I told you the woman I tutored when I was a student. She just did not know how to take an exam. I had a student in one of my classes, I think it was dynamics. Just shaking. Not even able to write his name. I gave him a special exam every time, in the office.

Swent: He was just so frightened?

Maslach: Yes. And I worked with him and worked with him. You couldn't believe how bad these things were. So I learned an awful lot about teaching. And there's an old cliché which is very, very true. You really do not know the subject until you teach it. And that is that you have to do so much research in getting ready to teach. For example, when I first taught a statics course, the text was by Lathe Merriam. He had put out two textbooks, which were very, very popular. I at the beginning of the summer decided I would do the problems in the book.

There were around a thousand problems in this one text. So I started in. Quite easy. I was just moving along. I would do ten a night or whatever. I even prepared lectures during the summer and jotted down notes and thoughts of the way I would approach something. When the fall came and I was to teach, I was given a desk copy of the book and also an 8 by 11, thin, bound book, which was an answer book. Every problem in the text was done in that book. A little piece of--that much space [demonstrating] for one problem. You know, very small type, essentially. So I had done all the problems on my own, and here was a book with all the problems done! Actually, doing the problems myself was of course much more important, much more valuable to the teaching. I went ahead, of course, doing the teaching.

We used to have six sections of a class like statics or dynamics, and we would give group tests. Six times thirty in the

class, a hundred and eighty students. We would design a midterm. Let's say three problems. We would contribute problems and choose three. And then when we graded the thing, we would sit around a table like this, and each person would grade one problem, and I would just pass those around, so there was common grading.

### Al Hale, a Very Good Teacher

Maslach: It was always very interesting to see who came out with the highest average grade for their class. There would be six people and six grades. We had a man by the name of Al Hale, who was a lecturer, who constantly was the top teacher. I was pretty much constantly number two [chuckles]. And then we had these other people who were not as devoted as Al and I were. I finally just broke down and said, "Al, I want to come and listen to your lecture." [chuckles] I just went to his lectures. He was a very good lecturer, very good knowledge of the material, better than mine. And he had one thing and one thing only: in statics and dynamics you had to make what is called a free-body diagram.

In other words, you want to analyze, say, your chair and the stresses on the chair because you're sitting on it, okay? And the stresses on the ground, the legs. Well, you essentially take that chair and put it in the air, and you replace the forces on the ground with the forces holding up the chair and so on: your weight through your center of gravity down on the chair. All of these things get into the free-body diagram. And once you draw that diagram, you can then, using basic principles of analysis, find out what the stress is at this point and so on.

He would require them--he just drilled them and drilled them, to use free-body diagrams. The key was that it was very tough. In the midterm, if you did not draw a free-body diagram for the problem, even if you got the problem right, he would give you a zero. You had to have the free-body diagram. Of course, I had never been that tough. But Al Hale knew what was fundamental and what was most appropriate. His people were very, very good.

So that was my exposure to teaching, by group teaching, which was very valuable because I was able to compare myself with five other people, for example. I was a lecturer from '52 to '54.

Associate Professor, 1954

Maslach: Nineteen fifty-four I became--I was appointed associate professor. Now, that's tenure rank. And I was appointed associate professor at step two or three, something like that. There's I think four steps--three steps of associate professor, three. So I was not appointed at step one. That was a very interesting discussion. I remember I went down one evening and talked with Clyne Garland, at his request. I had done quite a bit of research on the side, and my teaching was only part-time.

At one time in there, 1952, '51, '53, I had three positions: I was a lecturer, I was a research engineer on the project, and for a while I was associate director of the Institute of Engineering Research, which did the bookkeeping and handled all the services for all research projects in engineering. So I was head of what was called Service to Industry. We had many projects for industry, calling in and trying to get help on certain things.

Well, the university is limited [in] what it can do privately. We cannot compete, of course, with any private laboratories that could provide services. Many of the calls, I would refer them to where they could get the work done. But there was certain work that we could do and were the only people that could do it. So we would have all kinds of Service to Industry projects, where we charged 100 percent overhead.

But to be split three ways was kind of tough.

Associate Director of the Institute of Engineering Research

Swent: Yes, indeed.

Maslach: It was like one quarter, one quarter, one half. So finally, in '54, I was half-time teaching and half-time in research. The period that I spent in the Institute of Engineering Research, now called the Office of Research Services--I changed the name when I became director--was a wonderful operation. It really was the way--I think, it was the way universities ought to handle research projects. The ONR always thought we were the best. However, we violated at the university one of the accounting rules on the use of overhead. We should have been funding that office out of the overhead.

Governor Edmund "Pat" Brown Changed the Charging of Overhead

Maslach: But that had been all taken over out of--the overhead money that we charged the federal government--was all taken over by Clark Kerr and then later split fifty-fifty with Governor Pat Brown. This was one of the first things that Brown did when he became governor. He did two things which historians of the university would criticize him for: He raised the tuition; he doubled it. It was very low. And nobody screamed. Tuition now is a sacred cause.

But he also took half of the overhead from federal government grants. Put it into the regular budget of the university and gave it back to us. It just was moving from one hand to the other hand. But it was the beginning of the basic change of a state government funding the university. Major change, in which now the federal money was even being used.

You can argue both sides. For example, if a research project comes in here from the ONR, they're going to use electrical power; they're going to use water. They have space, they have desks, and they have this and that. Somebody's got to pay for it. Should the state pay for it? Now, this is a blunt question that has never really been answered. So overhead was the way to solve it. And instead of being grants in aid from the federal government, we went into contracts with the federal government.

In time, some of the large universities--private ones, especially--would charge very high overhead. For example, overheads of greater than 100 percent. Princeton, I think, is one of the greatest, and Stanford is close to 100 percent. While they were up there in the 80 percent bracket, the University of California was down around the 30 percent bracket.

Swent: What do you mean? That they only took 30 percent of the grants for overhead?

Maslach: Yes. The overhead formula is you can take so much for this, for that. You have to be very specific. For services you have to show where you're spending it. While the private universities have a far better accounting system than we do at the state universities--and you have to remember that state universities--University of California, I should say--provides for research time in this whole thing, so that a lot of the private universities--I'll use Stanford and MIT as examples--

##

Maslach: The problem with university overhead has been a continuing problem, and I'm still one of the experts in the nation on this [chuckles] because, believe it or not, I'm one of the dinosaurs that signed that first contract with the University of California and the Office of Naval Research, the first basic contract.

The University of California Requires Research, Public Service, and Teaching

Maslach: But private universities such as MIT and Stanford have many of their professorships split. In other words, MIT--many, many of them--50 percent of their time comes from grants and contracts, and 50 percent of their salary comes from tuition and so on. So private universities are quite different from public universities in that regard.

We at the University of California are extraordinarily lucky to have the system that we have had, in which we are able to do research, public service, and teaching. In fact, the constitution requires us to do those things.

Swent: That's the mandate, isn't it?

Maslach: It is. It's mandated. And it's amazing because every professor in engineering, for example, will schedule a certain fraction of his time for his teaching, a certain fraction of his time for his research and so on. I think there's an awful lot of bad-mouthing about research interfering with teaching. As one of my favorite professors used to say, "If you don't sin, you have nothing to say in the confessional." His point was that the best teaching was done by the people who are at the forefront of a given discipline, and I am a firm believer in that. It's a way of bringing graduate teaching, which you are working one-on-one with graduate students, down into the undergraduate area.

Henry H. "Packy" Schade, Director of the Institute of Engineering Research

Maslach: So the Institute of Engineering Research was sort of an engineering focus for all the contracts and grants and everything else. The director of it was a legendary professor of naval architecture, Henry H. Schade. His nickname was "Packy." He was one of the great naval architects of this century. He was the

head of the naval architectural design program in the navy during World War II.

He had the rare title of commodore, which is a flag rank title. In other words, admiral, but he was not an admiral. Because he had spent all of his time in the design office, so therefore he never had command of major ships at sea, and that's a requirement in order to be an admiral. So they resurrected for him the old, old title, commodore. That was his naval title when he retired.

He was a legendary person during World War II in the design of ships for the navy. There were a lot of big, major changes during that time. Modern ships. You look at Pearl Harbor, with those old masts on the ships? And you look at the "Missouri" or something like that or the naval carriers, the aircraft carriers. What a change! And he was the head of it.

So he was here and he headed up our naval architecture department as well. I was working under Packy, as associate director and also in charge of the Service to Industry. One day he called from Germany. He was on sabbatical leave, and I was acting director. He wanted me to be one of the first to be informed that he was retiring from this office and going full-time teaching. He thought he had served a long enough period in that activity.

Well, of course, he had informed the dean's office because it came directly under the dean, Mike O'Brien. So I just went on doing my thing as acting director. And he never showed up again [chuckles]. I had this great big office, a conference room bigger than this, and so on [chuckles]. That was kind of fun. I was able to use a lot of my knowledge on contract research.

But in '54, when I became associate professor, things were clearer because as a lecturer you have no research responsibilities and therefore it was very difficult to keep up with this activity and work over there, which I did. But I was doing it essentially on my own time. Few people realize that teaching as a professor, with all the graduate students that you have, especially foreign graduate students, is not a forty-hour-a-week job. I prepared all of my lectures at home, in evenings. I did all of this other activity at oddball times. Weekends. You'd be surprised how many times I would be at the wind tunnel. You know, things like that.

I truly believe, and there have been wonderful surveys of this over the years, that the average professor really is putting in about sixty hours a week. Just for example, to keep up with

the latest books and the latest papers, going to your meetings everywhere to hear the latest things that are happening, this was enormously time-consuming job. People don't give it the true credit that it needs.

So anyway, here I was, all tied up with two jobs. I'm an associate professor. Interesting little note here: You read the *History of Mechanical Engineering* by Werner Goldsmith.

Swent: Yes.<sup>1</sup>

Maslach: Well, he mentions a custodian by the name of Ben Carey, who was over in the Mechanics Building. By this time, I had an office upstairs in the Mechanics Building, so I knew Ben. I always got along well with all the staff people. Half the shop was working for me on that tunnel because it was such a big research project. So one day I came in there early, and I am early--you know, before eight o'clock because I have an eight o'clock lecture. Ben Carey was sweeping out the entryway to the Mechanics Building, and he said, "I see you're an associate professor."

I said, "What?"

So he stopped sweeping and pulled out the university bulletin and pointed down there. It was printed. That's how I learned I became associate professor [laughter]. So it was really quite interesting. Ben and I got along very well.

#### Hans Albert Einstein, Carl Vogt, and Practical Jokes

Maslach: And at this point I'd like to--since we're on Werner Goldsmith's history--he mentions Ben Carey and he also mentions Carl Vogt and some of the other people. Leonard Farber and others. Hutchinson, Johnson, Seban--these are the older professors. One of them, who taught fluid mechanics, open channel flow, was Hans Albert Einstein, the only son of Albert Einstein, the great Nobel Prize winner physicist. Hans and I were very close because we were both sailors. He kept a boat down at Berkeley Harbor, and I had a boat out in Richmond Harbor.

We would talk quite a bit and always had a laughing relationship, talking about boating. Carl Vogt was the big joker

---

<sup>1</sup>A History of the Department of Mechanical Engineering, Univeristy of California, Berkeley, 1968-1986, Werner Goldsmith, 1986.

of the Mechanical Engineering Department. He was absolutely amazing in his creativity on practical jokes. One joke that is mentioned by Werner casually about using ball bearings, was one that I observed because Ben Carey told me about it. It turns out that Hans Albert, who was on the short side, had a mailbox which was on the upper level of three levels of mailboxes in the entryway of the Mechanics Building. Between lectures, this is where people kind of brushed against each other.

At ten o'clock, the mail was in and Hans Albert would come from his nine o'clock lecture. He had modified the box by having the shop build a slanting shelf in the box, and when the door was closed, anything that was in the box through the envelope entry, would be sitting on this slanting shelf. Then when he opened the door, which he did with a string, incidentally, attached to the door, there was a mirror mounted on the door so he could, from his low stance, look at the mirror and see if there was anything in the box, and he could reach up and get it.

But Carl observed all this [chuckles]. So one day, Carl, after the mail came in, went up and dumped a full box--hundreds--of quarter-inch ball bearings into Einstein's box, and then we all heard about it. I was watching from the laboratory which was beyond the entryway there. I was just sort of making believe I was working some equipment, watching this whole thing.

So Hans Albert came in and all the people were there, getting their mail. And he opens the box with this string, and hundreds of ball bearings fall all over the linoleum floor there, which was, oh, twelve feet wide and twenty feet long. Of course, they were showering him. And Hans knew who was responsible. "THAT CARL VOGT!" Lots of laughter, of course, everybody, at that little practical joke.

#### Leonard Farber's Mercedes-Benz and Another Vogt Trick

Maslach: Another one which Werner mentions was Leonard Farber. Leonard had purchased a Mercedes-Benz diesel-engine automobile. I had by that time thought about getting a Mercedes when I went on sabbatical leave. It's kind of an interesting way to go over to Europe, pick up a car, and you have a car to drive. Other people had done it.

So Leonard was very proud of this Mercedes. Carl noted this, of course, and Carl being the expert on the internal combustion engines and so on, had a practical joke. What he did



was--every day in the week he would open the fuel tank and pour in some diesel fuel, the net result being that Leonard was getting better and better mileage, and Carl would increase week to week the amount he would pour in.

We all had coffee together, and Leonard would say, "Look at this. I'm getting thirty-two miles to the gallon." He got up to forty or something. And then Carl started siphoning out the fuel [chuckles], and the mileage figure went down from forty or something down to twenty, where it should have been all the time [chuckles]. But Leonard just went crazy, wondering what the hell was wrong with the car.

I remember, I was in on this joke because Carl kind of pulled me in on it. He asked me a question. I said, "Well, Lenny, you have a warranty on the car. You bought the car. The warranty is for a year. Take it in and tell them what's happening." Well, he really couldn't because the guarantee wasn't for this enormous mileage. He thought he just had some fantastic engine.

Finally--I don't know how Leonard found out about it, but he found out [chuckles] and practically beheaded Carl Vogt, in a playful way. They had all kinds of wonderful practical jokes carried on by all of these different people. You see, when it was a bachelor's degree-only college, you had time to do these sorts of things [chuckles], but we didn't have that kind of camaraderie later on. It became more serious business. Teaching today and its research commitment is much more serious than undergraduate teaching was in those days.

#### The Loyalty Oath, Not an Issue for George Maslach

Swent: I was wondering--of course, this was before you came back, but were there any repercussions from the famous loyalty oath?

Maslach: Yes. I came back right at that point. Nineteen fifty, right?

Swent: I think so.

Maslach: Nineteen forty-nine was the year of the oath.

Swent: Right.

Maslach: And so I came back right in the middle of the thing. I was not subject to the oath at that point. It wasn't until 1954, at which point everything was kind of--you know, quieted down.

Swent: It wasn't such a hot issue then?

Maslach: It was not as hot, no. Incidentally, just as a footnote to history, when we moved back here to Berkeley, we rented a house on Panoramic Way, 301 Panoramic. It was owned by one of the non-signers, a woman, professor, Sociology, I believe, Hodgen. Her father at one time was a regent and she was quite famous therefore as a non-signer. She went to southern California and worked--ah, near Caltech, the famous museum down there.

Swent: Huntington?

Maslach: Yes, the Huntington. So she was there for a while and came back. But then, at that point, she was close to retirement. She sold her property and just went back down to southern California.

The one man who did not sign that I truly respected because I talked with him about his non-signing years later was Hans Levy, in mathematics. He was truly one of the world's top mathematicians and a great teacher. He just refused to sign it. Of course, he represented an immigrant from Germany. He knew why he wasn't signing that loyalty oath.

It was a flurry, of course. I was not involved in it because I was not an academic at the time. I had my own reasons. If I had been given the choice of signing or not signing when I came in 1950, I don't know what I would have done. It was wrong, of course. It has been proven wrong in so many different ways.

#### Obtaining Signature Authority from Dean O'Brien

Maslach: Well, I'm past the practical jokes, and I just wanted to give you one more touch of my working at the Institute of Engineering Research. The very first summer, I had thrust in front of me about, oh, fifty files of faculty. I said, "What are these?" The first time I had seen the faculty file, which is essentially confidential. It contains material for his advancement and so on. The secretary educated me that this man is going to work on this project, so during the summer you could work on projects that you would obtain from the federal government or any other agency, and draw one-ninth pay for three months. The practice

was generally to draw two-ninths pay and then to take a one-month vacation. That was the pattern.

But to get that authority, to get that money, the forms, the bureaucratic forms you had to sign as a faculty member, and then they had to be signed by the dean and then later on, the dean of the graduate division because the graduate division had sort of overall authority on graduate students' work, and you were appointing graduate students. So when you made a proposal for a contract, they reviewed it at the proposal stage to be sure graduate students were there properly, etc., etc.

But then, when the contract came, they wanted to sign again on these forms for hiring the faculty. Well, that was absurd. Why should they--they already reviewed it. The students are there. Their activity is a student activity. Now this man is now going to fulfill the project requirements which were originally outlined in the proposal. So they could review the proposal, could review the contract, and then they had no real authority.

So I went down to the dean, and there I am. At that point, I was not even an associate professor [chuckles]. I confronted him with this question. Well, he was a pontifical type, looked like a minister, in fact; he had a fringe of white hair and bald.

Swent: Who was he?

Maslach: I have forgotten the name now. But he had been dean for a long time, before Sandy Elberg. So I met the associate dean, who would be monitoring this effort. He was a man in Anthropology, again a name that escapes me. But I just didn't get anywhere with them. They were just ignoring me because I was not the dean. So I came back and I contacted the dean's office. This was where I found out for the first time in my life that Mike O'Brien held a one-half-time appointment as dean of the College of Engineering and professor. The rest of the time he was outside, doing consulting work, primarily with General Electric.

And so my contact was with the famous Frances Woertendyke at that time. I said, "I've got all of these forms to be signed. All the files are sitting here right on my desk, on the conference table, in fact, and it requires Mike's signature." I learned for the first time, very importantly, signature authority. My card, which I had signed, told me what I was authorized to sign for and what areas of the budget, materials, equipment, you know, hiring people, what level people, technicians, what have you, and so on. But I did not have dean's authority.

So I said, "They're all here."

She said, "Well, Mike is coming in in a couple of days. I'll tell him right away."

I said, "This is really important because we have got about fifty, sixty faculty here who were not going to draw a check until these things get signed."

She said, "I know."

So I waited. And one day Mike called, and he came down at about nine o'clock in the morning.

I used to call him Black Mike. Other people did, too. But I used the words more often than others. He walked in and he sat down, he said, "Now, what is this problem?"

And I explained the problem to him. Well, he had never seen the problem because Schade, ahead of me as director, had signature authority to be able to sign these things himself. It had been granted to him by the dean. So I said, "You're the only one who has the authority to sign." And so I plunked fifty files right in front of him. I'll tell you. This is like a Chinese wall of files. Thick. Each one maybe averages an inch thick. And so he got all these--

And he just picked one off the top and looked at it. He couldn't believe it. I said, "The whole thing is stupid because the graduate division signs after this. Why they should have authority is beyond me." Even they admitted they weren't quite sure why they were signing off on it. But they wouldn't talk to me because I'm not the dean. He looked at me with that famous black look, and he really did look darker when he became frustrated and irritated, I think he kind of held his breath, and he would flush. And he had a darker complexion, so that he did get a darker look. And he had these piercing black eyes that would go right through you. And he just looked at me, looked at these files and he got up. Didn't say a word. Walked out.

Well, I was wondering what the hell was I going to do! You know, here I am. And so--I didn't have to wait very long. Twenty minutes later I got a call from Frances, asking me to come up and sign the form, signature authorization form. They neglected to sign any form for me when I was acting director; I was not given any form to sign, and I wasn't given Schade's authorization. I just had my own authorization when I was associate director, for some little things.

So I went up there, and I signed the form, because you have to have a special signature on the form, and Mike O'Brien had signed this [chuckles]. So I now had signature authority. That's a very important lesson in the bureaucracy of this University. I swear, far less than 10 percent of the people who work here ever know what a signature form stands for, but it's an extraordinarily important document. It really tells everybody what you are able to do, the clout that you have.

Swent: It gives you a lot of power.

Maslach: Oh, yes. So anyway, I got signature authority for more than I expected. But I just wanted to get rid of those forms. But he essentially gave me signature authority for the directorship, without giving me the title. He took the title of director, and I was the associate director, but I had all the signature authority.

#### A Bureaucratic Victory in Getting Contracts Approved

Swent: Were you able to streamline the process at all?

Maslach: I then signed all of the forms and got my car and drove down to the graduate division, which was in California Hall, and I took pack by pack of these files, and I dumped them on the associate dean's--of the graduate division--desk. It just covered his desk. He had no room for it because he had a small desk. So we were putting them in bookcases and so on. I said, "I'm interested in what you're going to do. What do you need to know before you sign that form?"

Here they have the most valuable documents of a man's life. This is what his career is based upon within the university. There's a form on the top; there's a proposal and a contract. Well, you can read the proposal and you can read the contract to make sure the contract follows the proposal; then you can sign it. It really should take you maybe fifteen minutes each. But the ability to look at these files, which had a lot of interesting data about the person--and some of these people were famous, you know, or infamous.

What happened was--this was the beginning of summer, about one week or two weeks into the summer. But what happened was that these files would come dribbling back. We had a call from the graduate division and would send a messenger down because these files--we would not trust them in the mail. We had to take

a messenger down and pick up the files and bring them back. It took the entire summer to get the fifty, sixty files signed.

Swent: And this happened every summer?

Maslach: No. This was the one summer, the first summer that I was associate director.

Swent: But it had presumably gone on other summers.

Maslach: Oh, yes. And so the last man was a professor of material science. He was a metallurgist, good friend of mine. I just felt that this was so ridiculous that I had to do something. I had to explain what had happened. So I went up to his office. He didn't know what the hell I was there for. [laughs] I just sat down. I said, "I just want you to know that eventually you will get your checks. Your form was the last one of those signed by the graduate division, and therefore you will get all of the money for the summer in one big check." He was laughing and glad to hear it. He thought it was such a ridiculous thing.

#### Learning How to Operate a Research Establishment

Maslach: So that was my job during the next semester. Since I was now appointed, with signature authority, I had a little more clout somewhat, and so I just started pushing. I had my reputation of being a signatory for that original contract, and so I really had a little bit of clout, you know, without having a title of professor. And so I just campaigned and within the semester, the graduate division agreed that there was absolutely no reason for them to be involved.

They had been pushed into it by the accounting department. Why, I don't know. And so the whole thing just ended at that point. In many respects, that was my first bureaucratic victory at the University of California [chuckles].

Swent: A big one.

Maslach: And it was. From then on, the forms were signed in the Office of Research Services, at essentially the dean's level, by somebody like me, and that was it. And the payment was made immediately.

Swent: Where were these files normally kept?

Maslach: These were the dean's files, or the department chairman's files. I would imagine under these conditions, either the department chairman files--yes, they were. And so as a professor, I am proposing to work two months on this contract and that contract and so on, and here I sign the forms. That's to get me the money, okay? This was all like auditing, accounting. I sign to do this work for two months, okay.

So the file would come from the department and go back to the department. But to me it was just one of the greatest bureaucratic messes, you know. It was a jungle. And it shows, though, how the university was changing. You know, we didn't have this bureaucracy imposed upon us when we were a bachelor's-degree-only university. There was practically no contract research of this kind going on. But now it was, and we over-reacted with all kinds of conditions, which we then slowly would relax as we learned how to operate a research establishment.

#### Sam Silver, a True Genius

Maslach: Also, while a lecturer but associate director of this Institute of Engineering Research, I had a wonderful ability to help people. The one activity I'm going to describe is one that involved John Whinnery and Sam Silver. Sam Silver was a true genius of major proportions. The space laboratory up on the hill is named after him. Years after he had died, why, I was the speaker at the dedication of that building. I must say when I finished my statement up there, the tears were flowing down my cheeks because I truly believe that Sam Silver was one of the great influences on the development of the College of Engineering into the graduate field.

He also was a man--came from the Radiation Laboratory at MIT. He was in theory of a theoretician. He of course knew all the people at MIT at that time. We had that same kind of a background, so we were able to speak. He was a quiet speaker. He and John Whinnery were the true leaders in the very beginning to change electrical engineering into the department that it was.

He had a magnificent ability--Sam, that is--of putting everything down into fundamentals and coming through as a classical scholar. His ability to simplify any problem and then lead you into solving it was truly great. I used to use him all the time, just to sit down and talk philosophically. He would come to the dean's office for something, and I would immediately, when we finished that something, ask him a question. I asked him

the question, "Sam, what do you expect from the public school systems for your children? First at the grammar school, grade school level up to the sixth grade, then junior high school and then high school." And we had a long, wonderful, philosophic discussion on this.

Basically, he just--in the first six--

##

Maslach: Basically he believed that the school system should not kill the child's interest in learning. He said there's really nothing of great knowledge, interest and so on in the first six years. Certain fundamental techniques: learning to read and write and so on. But you just want to be sure that they were not turned off at school and that in junior high school you get into something that's more meaningful in terms of skills and techniques, in terms of science and algebra, but nothing in depth, but algebra, certainly, and things of that nature. And writing. He was very big on languages.

And then in the high school, you know, that's where he expected them to do some teaching and the student to learn, and at that point he really felt--that he didn't expect much in the way of teaching until college. All of it was kind of preparatory. Yes, the last two years of high school, yes. Science and mathematics and that area. Also, of course, he never slighted the humanities. He always was big on the humanities.

He had a very unique view. Now, it's a view for the people who were going to college, and it's not a view for the people who would terminate their education in high school. But to sit here and listen to him talk, he was sort of like a rabbinical scholar, and was giving you some very, very sound information. I always remember listening to him. He was a man I always listened to.

I later found out that for years he was the chairman of the dean's committee reviewing files for the advancement of faculty. That's where he played a key role. His ability to really know what this man might be able to do. He had a better judgment on faculty appointments than anybody else I knew at that time. I really admired his ability to do that.

One day I'm sitting in that office, and--

Swent: Where is that?

Maslach: Office of Research Services.



Swent: Where was it?

Maslach: That was in Building T-3, which no longer exists. A temporary building. Temporary buildings--when I was a student, there were temporary buildings in the glade. They were there as remnants of World War I, and they were used in teaching aeronautics. They were removed and immediately in World War II a whole string of new T buildings were put into the glade.

There's a little history here of the university campus. The Botanical Garden used to be in the glade. If you walk through the gardens there, through the glade, you'll see notices on the trees, for example, of what the tree is, so that the glade, all the way up and down to the Agriculture Building was a botanical garden, and so that World War II had put in those first temporary buildings--I'm sorry. World War I had put in the buildings. They moved the Botanical Garden and put it up where essentially the Memorial Stadium is.

The director of the Botanical Garden had a house right there at the beginning of Panoramic Way, on which he could look down on the whole area. Well, when they moved the garden again to put up the stadium, which was dedicated, I think, in 1929, he just left the university [chuckles], and the botanical gardens were moved up into the canyon, where they are now still in existence. I don't think they will ever be moved again [chuckles].

#### Making an Illegal Transfer of Funds to Save the Electronics Research Program

Maslach: So anyway, here we are--here I am in this T building, and I had just received, the week before, notification of the university grants money for research. Now, the university grants a certain amount of money through the budget from the state for research for all professors, and you put in proposals of what you're going to use that money for. Now, the total amount of money for the College of Engineering at that time was probably on the order of fifty thousand dollars. The grants to faculty therefore were small.

There were two kinds of grants: faculty research only and faculty and student research, in which you were paying a student a small stipend. So it was about \$50,000 that was allocated for Engineering Research, to be divided by them through the research

committee, appointed by the dean, representing all of the departments.

Well, we didn't put out that money until the fall, when the proposals came in. So there I was, holding \$50,000 in a purse [chuckles]. Nothing to do with it. And in came Sam and John Whinnery, two people I had enormous respect and admiration for. I'll tell you the year it was. It was 1958. I had been promoted to professor, so I was now a professor, full professor. I remember the year because I was on the visiting committee at MIT, and MIT was going bankrupt because a man by the name of Charles Wilson, known as "Engine Charlie" because he was General Motors, was Secretary of Defense. He had held up all research contracts to universities. This had gone on for months. You can't do this. What are you going to do with these students? What are you going to do with these professors who are half-time on contracts?

MIT was using its endowment money to pay people. I was there and helped them to build up a big scream of the private institutions, and eventually they were able to get the president to override Charlie Wilson. What happened was that these federal contract monies were being held up for my contract, from the ONR. But it so happened that the date of my contract was sufficiently far advanced that the new money was not affected until later on.

But Sam and John had their electronics research laboratory money held, and they were going broke, right now. I don't know if it was Sam or it was John or both together--came up with a brilliant idea of a short-term loan of the "615 money." That was the number for the university research money for Engineering, our code number. That was our accounts number, really. If we could use that money to tide us over the summer, maybe Wilson will release the money to us eventually and Sam and John would be able to get the money back to us later, in the fall.

Well, it was a great idea--

Swent: Where did the 615 money come from?

Maslach: That was state money. So it was a great idea [chuckles], but I was the only one, or the dean, that could sign this. I was the only one with signature authority. The dean was not going to be doing it. He was not going to be around. And this crisis was now. So here I was, with these two wonderful men who had reached these enormous positions in the history of science and technology. They were sitting there, asking for me to sign a paper to loan all this money to tide them through the summer.

I think that that little decision was in a way much bigger than the decision I made with those forms [chuckles] and Mike O'Brien. Here I was, you know, \$50,000 in the hole, you know. And it wasn't my money. It was state money. And it was going to be used for research, but in a way not defined by the state. And it's their money. And yet I could see the tragedies surrounding all these students, all of a sudden laid off. What are you going to do? Everything will come to a grinding halt.

I just remember sitting there, looking both men straight in the eye [chuckles]--lots of eye contact--and I just said, "Okay." I went out and got an authorization form to move the money from this account, 615, to that account. Strictly illegal. Strictly illegal. And I just moved \$50,000. Fortunately, within the summer, two months, money from the federal government came through and it was returned. But it was before the research committee met in the fall that I had the money back in my hand. But no one ever has known about that. This is the first time this illegal transportation of money [chuckles] has been revealed.

Swent: It's a case where what was right and what was legal were different.

Maslach: The accounting procedure I used was totally illegal. I was never called on it. The accounting people within the Office of Research Services handled it, and these were people working for me. They looked at me [chuckles] with a strange eye, but I did it. It kept the electronics research laboratory going during the summer.

And you know, it's the sort of thing that I feel was part of the times, and yet it reflected my own upbringing I tried to give you in the earlier interviews, where I was willing to take a chance. I'm willing to do things. I'm a doer, not a talker. We spent maybe fifteen minutes, and we did it. This is the way I like to feel that I moved from then on because in my teaching, you know, I would throw a piece of chalk, and people would learn physics. [chuckles]

So it was a part of the times.

Swent: You did take a big risk, though.

Maslach: I did take a big personal risk, and I don't know what I would have done, really, when you get right down to it. I never thought about it again after it was over. I really didn't. I always remember John and Sam thanking me profusely, time and again. But it was the sort of thing that I did in that time.



## VI FULL PROFESSOR OF ENGINEERING, 1958 to 1963

Changing from a Research Engineer to an Academician

Maslach: So we're now up to roughly 1958. I had been going on, doing research. I was active in all kinds of academic affairs, and I was doing bureaucratic things in the Institute of Engineering Research. I was half-time appointment in 1954. I got a lot of ribbing from my wonderful colleagues [chuckles] because when it was printed in the bulletin--when my first appointment, I should say--I got a lot of ribbing because it was written in the bulletin, "half-time"--you know, paren 1/2 and then associate abbreviated as "ass". Professor and everything [...]. And so Carl Vogt and all the other people in the Faculty Club: "Oh, 'half-ass' professor." [laughter] That made sense. They really know you! So in '58, when I became full professor, I was no longer half-time. I was full-time. I got the ribbing from the people: "Oh, no more 'half ass'." [chuckles]

So I had plunged into academia in 1954 to 1958, and I truly had to immerse myself into the whole academic process. I did become a professor, from a research engineer, and I studied, and it was different from a person who had that wonderful background of taking a Ph.D. and having gone through the academic process in large part as a student, with his research professor. I missed all of that. And so I was now having doctoral degree students and master's degree students, and I did not have those advanced degrees. I was being successful at it. I was writing papers right and left.

Swent: Did you ever feel that it really made any difference?

Maslach: What do you mean by that? I don't understand.

Swent: Well, did you feel the lack of these advanced degrees at any time?

Maslach: Oh, no. I didn't ever feel it made any difference. I was never discriminated against. In fact, I would have to spend all kinds of time outside because I would go to a meeting in Washington, D.C., or something like that and they would have my place tags for me for "Dr. Maslach," and I would have to say, "I'm sorry, I'm not a doctor; forget it." Well, people would ask me at a much later date, "How come this happened?" and I said to them, you know, this happens all the time within the university, especially within the professional schools and colleges in which the Ph.D., doctor of philosophy, is not the end degree. We have a doctor of engineering degree as well as a doctor of philosophy. You can really talk in terms of differences of criteria here. And a doctor of engineering degree is one in which you really solve a major problem.

What happened was that during my times at MIT and General Precision, and even the first years here, I solved many, many problems. And so people would look at my MIT experience and say, well, hell, that was the equivalent of graduate school. I have always put it a different way because when I, in time, learned so much more about the whole process of appointment and promotion, I just said my appointment proves that the system works. There's nothing in the system that says you have to have that degree. It might mention a degree or equivalent or something like that. But it shows that quality is recognized.

Just to jump way far ahead, I remember the appointment of a full-time faculty member in the College of Environmental Design, with tenure, full professor, who finished high school, period, and that's all. But the man was fantastic. Just an amazing fellow at that time. And there were other kinds of examples that I could cite, without mentioning the names, of people who have made it in this regard.

### The Story Behind the Double Promotion

Maslach: Just kind of jumping around here a little bit, I was promoted from associate professor, step whatever, to full professor, step two, which is a double jump. I couldn't understand why I was given that double jump until years later. In violation of the confidentiality requirement, a man that was on my promotion committee told me why. It was a rather interesting story. I had been asked to go down to Mt. Hamilton because one of the things I was expert in was gearing, just mechanical gearing, movement; and this is part of my machine design background at MIT, development of precision gearing for the radar, and later on, at GPL.

And so I didn't know what the problem was. The director of the laboratory down there, said he would have a car with a driver take me down on Sunday. I couldn't understand that. It was a real cloak-and-dagger kind of an operation. I got in the car with this driver, and there was a professor of astronomy with me. It turns out that he was a man who knew me back at MIT. And so we had a long, wonderful drive down to Mt. Hamilton, talking about MIT.

When I got there, we had coffee, and the director of the laboratory informed me of the problem. You go out to the dome, and here's this big gear, which is about twelve feet in diameter, in the frame holding the mirror, which, incidentally, is a blank that had been cast about half the diameter of the big Mt. Palomar telescope. Maybe two-thirds of the diameter. The blank was good, but it was just sitting there for years. So they got it, polished it, and made a telescope.

They had all kinds of subcontractors in the design of this telescope, and the gearing was made by a very prominent, very good firm. But the putting together of the whole system--this is where a failure occurred. Always when you teach-- I taught, from practical experience--something falls between the chairs. This firm develops the gears, and they're perfect. This guy designs the equipment, and it's perfect. Now we're going to assemble it. But the gear people are not going to do the assembly; somebody else is going to do the assembly. Hey! What's the liaison between these two groups? There was none.

So finally, basically there was a machinist assembling this thing on the mountaintop and he made an error, and he made an error because he did not understand the theory of gearing and he did not understand the specs. So what was happening, they turned on the power and guess what? Chips of the gear were coming down from up on top there. They're chewing the gear to pieces. The big gear was bronze. The small gear that was driving the pinion was steel. The steel gear could take it, but the bronze gear couldn't.

So they ran some experiments and viewed some planets, and the planet, instead of standing still, was going up and down, like this [demonstrating], in a sinusoidal fashion. And so I took that photograph, and the astronomer had already done the analysis. I said, "What's the frequency?"

He said, "It's the geartooth frequency on the big gear."

I said, "That's what I expected." I said, "I know what the problem is, but I'll have to prove it to you."

Solving a Gearing Problem at Mt. Hamilton Observatory

Maslach: So I climbed on that big thing. I was way up in the air. I was, like, thirty feet up in the air, without any safety straps or anything [chuckles]. And I made a casting of the geartooth by using in one place a plaster of Paris type of a material, and in another place the more rubbery type of material. But they set. It wasn't hard material, but it was like plaster of Paris would become, but it was quite good. And I used the castings to show where the damage was done.

I brought it down. I had brought together with me all kinds of measuring equipment, large micrometers and all kinds of things. I really stunned them with all of my measurement devices. So I got down there, and I did all this work, and by that time it was lunch, so we had lunch. It's a wonderful little colony up there, you know. They've got some houses and some people there full-time.

Swent: I was there just not too long ago.

Maslach: Most of the people live down below, you know, and drive up that road.

Swent: Beautiful drive.

Maslach: Yes, beautiful drive, wonderful road. So anyway, we had lunch and everybody is kind of looking at me, wondering what I was going to do next [chuckles]. I felt like the sorcerer there. So I went out there in the laboratory, measured the pinion, and I got down these castings. They had to set; they took time to set. And I measured them carefully, and I pointed out all of the grooves the damage, and then I made the computations for the gear tooth and showed where--in a gear there is what is called an addendum and a dedendum. Those are the two parts that work, one on the other, so the point would come in on one gear here [demonstrating] and roll and ends up at this point on the other gear here.

Well, when the pinion came in here on the big bronze gear, the setting of the two gears, the distance between the centerlines, was wrong, and it would dig into the root of that gear. These are all technical terms. What happened was called tip interference. The tip of the pinion would dig a groove in the root of the big gear, so out would come little pieces of bronze [chuckles]. I said this is called tip interference, and then I gave a lecture on gears and gearing, and showed how the rolling aspect works and why they were getting this oscillation in this path of the planet, because it was not an involute



rolling process because the tip had dug in and there was no involute there. "Involute" is a description of the curve of the gear tooth.

Well, you could pull the gears apart. You know, it's a simple thing to do. But basically you don't want to do that too much because then you get backlash, too much play between the gears if you pull the gears apart. So I went through the computations. I could not measure the distance from the center of the big gear to the distance of the center of the small gear, but this is essentially the critical thing that should have been done.

What the machinist had done when he had assembled it was he had just put a shim between the gear faces, five-thousandths-of-an-inch shim, and then just blocked the pinion. He had not measured--he should have measured the distance from here to here. That is extremely difficult and has to be a custom-made measuring device. And so I said that was what had to be done.

Well, it turned out that everybody knew that something was wrong, so everybody had instituted a lawsuit. We had a lawsuit from the general contractor to the sub and the subcontractor to the gearing manufacturer, the gearing manufacturer to the main contractor who had done the assembly, etc. The whole thing was just a circle of a dozen legal suits that had been filed.

The whole thing was secret because they could open up the lockers and get the blueprints out on Sunday [chuckles]. They had keys, which they shouldn't have had, and they opened up the contractor's lockers and spread the drawings. That's why it was all done on Sunday, when only the staff was there [chuckles]. They closed the gate on the top there and wouldn't let anybody in, all Sunday.

It was cloak and dagger, for sure. I, then that afternoon, just dictated a report to a secretary. She typed it right up, and I signed it, and that was the report for the director. I wasn't involved in the legal suits and so on, but they all evaporated when the gearing contractor was called in for a small amount of money to do the proper installation. The gears today are still damaged in the root, but that root doesn't operate when it is properly meshed.

What happened was that when my case for a full professor came up, it was a strong enough case to be promoted to professorship. But the chairman argued that this was a fantastic thing that I did for the university [chuckles], this one little report sent by the director of the Mt. Hamilton Observatory to my

file, unbeknownst to me. He just wanted the dean to know. Great commendation, you know. How valuable this was. And so something I did, which cost me one Sunday [chuckles], and that was it. It was a wonderful drive down and a wonderful drive back [chuckles].

I was driven back by the driver from the observatory; the astronomer friend of mine did not come. Nick stayed down there. He was working down there. He just came up to make sure that I was the guy that came down. So on the basis of that work at Mt. Hamilton, they gave me a jump start up to step two [chuckles].

### Daughter Christina's Parallel Career

Maslach: It has been fun, just as a side issue, to talk about this because, as you know, we have a daughter, Christina, in the Department of Psychology. I kind of followed her degree, her advancement, so I know when she became full professor and when she went on to different levels. Without going into the details of this [chuckles], she made full professor at roughly the same age that I did. I was ahead of her a couple of years, but she was right behind. She has gone up the ladder and had accelerations, double jumps. But she has just followed essentially the same type, and now she's on special salary, which is above the published rank.

So many steps. There used to be only four steps, full professor and special salary, but now they have seven steps, I think, and special salary after that. We went into special salary about the same age [chuckles], so she has been picking up on me [laughs]. It's kind of interesting to think about all this history, and then having it repeated with a daughter in the same area. As I keep telling people, I am no longer known for what I have done at the university, but I'm known as the father of Christina [chuckles].

Swent: She has been outstanding.

Maslach: I would like to finish up that period of the fifties up to '58 or '60. That was my period while I was doing bureaucratic work in the Institute, from '54 to '63, when I became dean. That was the ten-year period that I was a professor. Do you follow me? Remember my ten-year schedule?

Swent: Right.

Maslach: Well, this was the period. Sure, I was doing that other work, but I was doing research. In '58, Sputnik was fired, and it was a lot of concern--why aren't we doing this and so on. Well, all of a sudden, our project became famous. We had done all this work, and all of our reports which were unclassified were sent to Russia, as we later learned directly, when I was talking to Russian scientists. This was all unclassified. They could just pick it up and don't even have to put it in a diplomatic pouch.

So they had no research of this nature at all. They used brute force and awkwardness to put up a very large satellite. All of a sudden, there was just enormous pressure upon us as a project to do more, get bigger and this and that. We knew that our project was a very useful project, of course; but it was a scientific project, and the wind tunnels they were talking about being built were ridiculous and did not have to be built.

We had done enough of the basic science and the engineering was there to do the design of the satellites.

Swent: This was still the work on the spheres.

Maslach: Oh, well, it was not just spheres. Excuse me. I better--

#### Research on Drag on Cylinders

Swent: You hadn't said what else you were doing.

Maslach: We turned out hundreds of reports. The first one--I was just telling you about Enos Kane and spheres. Rick Sherman worked on drag of spheres. Other people. My best work, in my opinion, was when I did the drag on cylinders. I had a very unique technique in the wind tunnel of holding the cylinders and screening the edges, the ends of the cylinders so that they would not have any tare problems. That's a technical term.

I don't want to get into details, but if you look at--

##

Maslach: If you look at any space station-type equipment--satellites, what have you--you're dealing with fundamental, basic geometric shapes: spheres, cylinders, flat plates, and so on. And so drag force measurements in the wind tunnel concentrated on those things as fundamentals that would be then useful for any designer and aerodynamicist. Years after I did that work, I would be

getting questions from people. In fact, just a year or two ago, I got a letter in the mail, asking me for a report which was issued back in the sixties. [chuckles]. It's kind of ridiculous because much of what was in those reports has already been translated into the literature.

But I also did a very nice job on drag on cones, which is another fundamental shape. You know, cones, angle of attack, not just cones straight into the stream but also at angles. Professor Larry Talbot went on and did the theoretical work which augmented that experimental work that I did. So we had hundreds of reports of all kinds. Going to this region, which is the last region where you can use normal fluid mechanics, and then the region where essentially you have what is called free molecule flow, and that is that individual molecules hitting the spacecraft is what counts, and you can compute all of that. But basically in drag profile, the drag coefficient is on a trajectory here [demonstrating with hands], and free molecule flow is back up here. And in between, what is the curvature of the drag coefficient term between here and there? That's what we were doing in this wind tunnel.

#### Service on the Research Committee of the Academic Senate

Maslach: So Sputnik, as I said, created a whole new period for us in that environment. If I may kind of backtrack, I truly embraced the academic world. I want to point out that the constitution calls for there being an Academic Senate. Now, it doesn't say what the Academic Senate is going to do, but in the standing order of the regents, which come out--new standing orders all the time, the Academic Senate had control of teaching content; they had control of admissions standards and therefore the content of the coursework; they had control of the standards of the degree. So the academic side of the University of California resides in the Academic Senate. The president and chancellor do not have that authority. That authority is delegated by the regents to the Academic Senate. So there's this working together of the administration and the Academic Senate.

The greatest activity, of course, is in coursework and the appointment and promotion of faculty. In the coursework, the committees, the graduate committee, which created the graduate division, and the undergraduate committee, these are enormously powerful committees. One of the things that I now came into was the ability to be appointed to these various committees. I

enjoyed this because it was a whole new world. You know, of academia.

The one committee that I truly enjoyed the greatest was the research committee. I was appointed to that, obviously, from my research background and all the other activities I had been involved in. It was just wonderful to see them distribute research monies and how they did it campuswide, how the academics proposed to use the money and so on. I was not only a member for years but as chairman for a number of years. During that period of time, there was this--

### Alan Renoir and Rhesus Monkeys

Maslach: Let me give you a little story: There was a famous motion picture director, [Alan] Renoir, son of the famous painter, Auguste Renoir. He was over here on leave from France, and he was in the Dramatic Arts Department, and he wanted to write about academia and research. What are you--how do you do research? And so he asked if he could sit in on the research committee meetings, Alan Renoir. He became a professor here. He was in the French Department.

Anyway, he sat--a wonderful man. He would just listen intently as these academics around the table here would argue and make decisions--discuss, not argue so much, you know--the validity of this proposal, the degree to which we should fund it and stuff like that.

One day, I was chairman and a special request came in from an animal laboratory down in the Biosciences. Due to a failure of a steam heating valve, an entire colony of monkeys had been destroyed. They were killed when the valve allowed the heat to rise to enormous temperatures, okay? And here is the life's work of a group of faculty. Here the monkeys, which were going to be the study, with years and years of observation destroyed. And so the hope was that the research committee would allocate funds to replenish--in fact, establish--a new colony. These were the Rhesus monkeys, you know.

It was a wonderful project with enormous influence on health and disease. You just looked at this--and I sat there, and I suddenly looked to the side because Renoir used to always sit to the side. He never would sit at the table. And he was crying. Tears were rolling down his cheeks. I just suddenly realized what it was. It was this imagery. Here was this famous motion

picture director, and the imagery for him was this colony of monkeys over the weekend, trapped in a room and killed. He saw it. We looked at it from science and so on. And I can understand why he wanted to sit in on our research committee [chuckles] meetings. So we just pulled him up to the table and we talked about it. Of course, we made the decision to replace the monkeys. It took a big chunk of our money. But I remember that as one of the better decisions of the committee.

We also funded in the odd ways, little things that suddenly were important. So we would have the money in order to do that.

### The Faculty Club and Networking

Maslach: I really and truly enjoyed academia. I had joined the Faculty Club earlier, when I was a research engineer, but I never really understood it. It was when I was teaching, even as a lecturer, I would go over there for dinner because I was staying down in the office to grade papers or something, and I would sit down at the chemistry table. Here was Seaborg. Here was McMillan. McMillan I knew from MIT Rad Lab, you know. Here are all these people, and I would sit and have lunch and talk with them. And this is the way academics were to me. The club was the heart of the entire system.

If you look into the history of the club, it truly is the basis for, the center for networking. Not as much today as it was then because we have a larger faculty and we tend to be more spread out, and the club is not central. It's close to Physics and Math and Chemistry and so on. Faculty Glade is not conducive, say, to Christina, who is way down on the north end of the campus, northwest corner of it, in fact. It's a long distance to walk over to have lunch.

### Enjoying Serving on Faculty Senate Committees

Maslach: But I really enjoyed this activity, and I soon became--was appointed to committees that reviewed the career of a person: Should they be advanced, how far advanced, etc.--the appointment, the promotion. I got into that process during that period of '54 to '58.

Swent: Who made the appointments?

Maslach: Well, the appointment is finally made by the chancellor, but if you read the academic personnel manual--about that thick [demonstrating]--it has a section on appointments, about that thick [demonstrating], which I contributed to in large part when I was provost and even when I was dean. The rules of who has what authority to search; first you have to get the position, the FTE, full-time equivalent faculty member. And the budget says you must appoint at assistant professor level. You might be able to argue that and get that augmented so that you can get one at a tenured professor level. But in general, overwhelmingly, you want to appoint at the assistant professor level. We'll get into that in the deanship business.

But then you go down through all the rules and regulations. The appointment proposal is from the chairman, through the dean, and must be approved by the dean. And then it goes to the vice chancellor of academic affairs, where he reviews it and submits it to the budget committee, which is a committee of the Academic Senate. They will appoint an ad hoc committee, who then review the proposal and make their opinion known. The budget committee will then advise the chancellor. That's written into the rules and regulations. And the chancellor will then act.

He can take the advice of the budget committee, or ignore--or not ignore it. He ignores at his peril. But he could come up with a decision other than the budget committee. We're jumping ahead to when I become provost.

Swent: Right.

Maslach: In this process--a chancellor has final authority. Quite often, the chancellor will delegate authority at the assistant professor level to an associate vice chancellor or provost. But for tenure appointments and promotion to tenure and promotion to full professor, he alone has the authority, and it's not delegatable. So it's a very complex process, and takes time--but it's an extremely good process. I will defend it with anybody on this. It really brings the entire campus--you have essentially a quality control system on this, and you don't judge just an engineering faculty by engineering standards but you judge them by college, by campus standards and so on.

Swent: I was wondering: On these committees did you sort of indicate your interest in serving on a committee before you were appointed?

Maslach: No, not then. You now do that. That's a fairly recent change, about ten years ago or so. The Senate would send out a statement asking you to put down your interest in various areas. But in

the beginning, no. And the people who control that--if you really want to get into the Byzantine functions of the Senate--is the Committee on Committees. That's an elected committee, elected by the faculty members, not an appointed committee, elected.

So very democratic. I never was a member of the Committee on Committees. However, I notice that Christina has been a member of it several times [chuckles]. But she has been heavily involved in the academic side.

I got into this academic mode. In fact, I got into the business of being on these committees, the review committees, they are called, and I served on quite a few of them. I was serious about getting the job done fast in those committee activities. When I was chairman of a committee, I would personally [chuckles] write the first draft and then I would walk it over to a committee member, one. I'd pick it up, take it to the next committee member, and so on. I would never allow these things to dwell because some of these committees take months in order to get their work done. I just pushed it, pushed it. So I got a reputation for someone who got things done.

I one time was asked to chair a committee in June, after the semester was over. That was a hateful thing. Here you're doing your research. You're heavily involved in all kinds of other--and "Would you do that?" "Okay." And I did it, and I pushed it through fast. One member of the committee disagreed with the general report, so he had the right to put in a minority report, so we put in the majority report. Oh, a month or two later [chuckles], the minority report came. By that time, the man had been promoted [chuckles]. No question. So I had a reputation for that kind of a thing.

#### A Prize-winning Presentation to the American Institute of Chemical Engineers

Maslach: But I truly enjoyed everything during that period. I really began that nine-year academic period--you know, going overseas and giving talks. In fact, my first paper was presented to the American Society of Chemical Engineering--there were two societies. I'm not sure I got the right name there. But I went to one of their annual meetings and was talking about vacuum systems. Here we have this enormous vacuum system here. So I gave a paper. They gave two awards. The American Institute of Chemical Engineers, excuse me. That's the name of the society.



Swent: Chemical?

Maslach: Chemical Engineering. Put it as a--

Swent: No, you said "Chemical," but I'm surprised. I thought mechanical.

Maslach: No, it was Chemical Engineering. And so the two awards were for the content in terms of new information, and the other one was a prize for presentation. They put in the award for presentation to get people to give good papers and good presentations. They had a wonderful manual on how to give a paper and how to do the slides, everything. I used it meticulously. And when I came back home a month later, I was informed I had won the prize for the best presentation [chuckles]. So that was my first paper at a society meeting.

Swent: Wasn't Chemical Engineering a little bit of a departure?

Maslach: No, because chemical engineering is heavily involved in heat transfer and fluid mechanics, so it's a natural, really. It was a wonderful thing. What I want to stress is I plunged in with both feet into the academic side. It was really fun. To me, it was the greatest fun.

I think we ought to kind of stop here now because '58 is a critical year. It's the year that I went on sabbatical leave for the first time, and it was the big year for the Sputnik and the rarefied gas dynamics. There was a paper every day.

Swent: The sixties are coming up.

Maslach: We'll get '58 to '63 very fast, and then the deanship will start.

Swent: Okay.

### Sputnik and Upper Atmosphere Dynamics Research

[Interview 6: January 19, 1999] ##

Swent: We're in the conference room at The Bancroft Library, and it's January 19th, 1999. This is Interview #6. Last time we had gotten up to 1958.

Maslach: Fifty-eight was a very critical year in my life and actually in the life of the nation as well. At this point, I can speak

knowingly, more completely about my activities, which took a sudden turn for internationalism. As everybody probably recalls, in 1958 Sputnik was fired by the Russians, and the first satellite started going around the earth. You probably remember that odd noise as it went by, and you would see, actually, the trail under certain optical conditions. Sputnik, to get an idea of scale--you actually could--

Swent: Could you actually see it that clearly here?

Maslach: You could see the trail, actually. You couldn't see the two-foot-diameter Sputnik, but you could see the trail or the condensation. It was very low. It wasn't high.

Swent: There must have been less air pollution then than there is now.

Maslach: Also you got the sun glinting on it. That was the way I saw it because my house faces out to the west, and if we had the conditions where the Sputnik was coming by near sunset, why, you got a good idea of--it was very interesting. So Sputnik was about two-foot in diameter, with a couple of antennas sticking out in the back, something like television rabbit ears of the old television sets. The largest item that the United States had shot up into the atmosphere was called by the Russians, derisively, the grapefruit. It was about, oh, six inches diameter. But actually, the grapefruit contained more electronics and research equipment for the United States than all of Sputnik did, even though Sputnik was big.

The big decision had been made by the Russians to use large thrust rockets. They always had the ability to put bigger things up into the atmosphere than we did because we never had the thrust conditions that they did. They had these big rocket engines and they could put up massive pieces.

It became, of course, the big year when there was a big debate: Were we number two to the Russians in technology and so on? There were major changes in education: more science, more mathematics in the high schools and so on. For me, the big change was the fact that I had been doing research, along with a number of other people here at Berkeley, on upper atmosphere aerodynamics. Now, when people started screaming, "Why aren't we doing research in this area?", why, we were able to come right out and say, "We do research in this area. We've been doing it since 1947."

Dick [Richard] Folsom and Mike O'Brien started thinking about this way back in the days of the war and thought that there would be need for upper atmosphere aerodynamic research. We got

started with a research program, under the sponsorship of the Office of Naval Research, in 1948. What we did was to build a wind tunnel which could simulate the conditions in the delicate area where you leave the earth's atmosphere and enter into space. This was always considered to be a problem area. If you came in wrong, for example, you could burn up the equipment. You had sort of a window of space through which you could shoot, going out. You probably recognize it. When they miss a shooting opportunity now, they say, "Well, the next time we can shoot is such-and-such a date." So you do have to take into account atmospheric conditions.

To give you an idea, if you're a hundred miles up in the atmosphere, molecules are so scarce that the free molecular path, which is a technical term, is how far a molecule will go before it hits another molecule. That means at a hundred miles altitude the free molecular path is roughly a hundred feet. So basically, a missile up in those areas is just being hit by molecules every once in a while. That's how rarified the atmosphere is up there. That's why you do space walks and all those other things. And you can have these satellites which--we now have about fifty satellites up there--for television and communications and so on. They're just going around in a synchronous pathway. I don't know how many satellites there are above the state of California, for example. They're there, all the time.

We had been doing this research, unbeknownst to a lot of people, except the Russians, who used to take our classified reports and send them to Moscow in the regular mail because they were unclassified reports [chuckles]. We knew nothing about what research they did until I met some of these people, Russian scientists, later, in 1966.

#### Sabbatical Leave in Europe Sponsored by NATO-AGARD

Maslach: So 1958 dawned with Sputnik and guess what? I got a telephone call from NASA predecessor, NACA, asking if I would go over to England and give some talks about our space research. It was about time for me to take a sabbatical leave. We thought about the kids. It was just perfect timing because they were then eight, ten, and twelve. They were not in critical years of schooling. If they dropped out for six months, why, it would be okay.

Swent: Excuse me. I think that the last mention you made of your children, there were only two.

Maslach: [chuckles]

Swent: The third was born after you came to California?

Maslach: Yes, in 1950 he was born. Christina, who is now a professor here at Berkeley. Jamie, who was next. He owns and operates a big company down at Emeryville. Making glass candles, amongst other things--a lot of glassware. And Steve, who is the artist, a sculpture and glass person up at Bainbridge Island. But they had been moving along, and I will get into their upbringing at this time, too.

Up to this point, there had not been much discussion in the United States about space. What happened was, of course, you would hear this noise in the radios and so on, and you would look up and look for that thing, and you knew that there was something passing over you and it was Russian. You knew roughly that an atomic bomb was about the size of a basketball, as an example. Here this thing was about two feet in diameter. How did we know that there was not an atomic bomb up there that would be coming down on us?

This is what energized this big American push to science and move ahead in space, send a man to the moon (which came later, of course), and all of this activity. And here we were, right in the middle of it. We had been doing all this research for years. All of a sudden--we were first unknown, and then international stars. I, as I said, checked with various people, and the sabbatical leave turned out to be sponsored by NATO-AGARD, A-G-A-R-D. That's Advisory Group for Aerodynamic Research and Development. It was headed up by Von Karman, the great scientist-engineer who had been at Caltech for many years and who had done a lot of work in a number of fields: heat transfer and fluid mechanics.

They contacted me and asked if I could give a number of lectures throughout Europe while I was on sabbatical leave for six months. I agreed. That was the end of that, for the moment. I went first to England and gave papers there at the Royal Air Force building. This was the first time the people in England had ever even thought about the activity, even though they had gone through the V-1 and V-2 problems of World War II.

I went to NATO headquarters in Paris, first picking up a small Mercedes. I asked, "How many lectures do you want me to give?"

The man's last name was Guillaume; it's actually William in French. Roland Guillaume. He was one of the vice directors of NATO. He said, "I'm very sorry, but this is a real problem. We sent out to all of our organizations asking if they wanted to hear you, and everybody wants to hear you." He says, "We cut it down. Could you give thirty lectures?"

Swent: Oh, my!

Maslach: In all the different countries of NATO. I said, "Let's see how we could schedule it because I'm supposed to be on sabbatical leave and doing refreshment and thinking of my research. I need time for that." So anyway, it ended up I did give thirty lectures in 1958.

Swent: My goodness. Was it the same lecture?

Maslach: No. What I did was I prepared basically five different lectures. I gave one or the other. Some places I gave more; others, less. But I started in down south. Guillaume had figured out the best thing to do--this was January--was to start in Italy and just move up with the weather. And so I finished up in England and France. But it was a wonderful, wonderful experience for me, of course, technically. One could imagine for me the value of such a period of time. I met all of the top people throughout France, England, Italy, and Germany.

#### Lecturing in Aachen to the Top People in Aerodynamics

Maslach: I will just tell a couple of small stories about the lecturing. For example, in Germany I lectured in Aachen. This was the famous university where Von Karman, in fact, used to teach. When I came into the lecture hall, I noticed in the front row some of the most famous people in aerodynamics. These were Germans who had been taken over by the Russians and were Russian wartime scientists. For example, boundary layer theory, which I will not try to explain to you--

Swent: What was the word again?

Maslach: Boundary. Boundary layer. Two separate words. The man who developed it was a man by the name of Schlichting. But there were a number of these people. There's Schlichting and others right in the front row, and I'm saying, "Oh, brother." These are the people that--you studied their books. These were the people

who started many of the big research activities of the world in heat transfer and fluid mechanics.

So I went through my first lecture, and I was absolutely dumbfounded by the reaction. I just was totally in a zone. I didn't know what was happening because what they were doing was they were pounding on the little shelves, which were attached to the backs of the seats. In other words, if you were sitting facing the podium, there would be the person in front of you, and his seat back had a little shelf which you could put down and take notes, write on. These were being pounded with their fists [pounding table with his fist]. This was the applause.

You had about a hundred people there in a fairly small room, a comfortable room. And they were just making this racket, which I couldn't--I never heard anything like that before in my life. I kind of looked and nodded. I was saved of course by the man who was running it, the master of ceremonies. He came up and--didn't tell me that was applause, but gave his thanks for the lecture and said, "You know, we are just barely starting on this program. Our thinking and this lecture has been wonderful, but I'm sure you have more to say." He said, "Maybe we should have some coffee. Could you give us a second lecture?"

I said, "yes," so I went and I gave, after coffee, a second lecture. More applause. I went after that with all of them--not the students--for lunch, wonderful lunch--and came back and gave a third lecture.

Swent: My goodness.

Maslach: So I spent the day with them. After the third lecture, I came to a rather obvious ending point.

Swent: What were you talking about?

Maslach: First there was a lecture which was essentially on the physical equipment that we had developed: the wind tunnel, which was a very unique wind tunnel that simulated the conditions up that high. The pressure in the wind tunnel when we were operating was on the order of, oh, fifty to a hundred microns of mercury. A micron is one-thousandth of a millimeter, so you had 760 millimeters up here of mercury for the full atmosphere; we're down to very, very low atmosphere conditions, well under a thousandth, the atmosphere, that you experience here on the face of the earth. So the equipment building was a big aspect.

We also developed techniques of flow visualization. Even with those very low pressures, the technique of exciting nitrogen

by an arc upstream. You would get a glowing gas, very similar to the aurora [borealis], same process. This aurora glow was sort of an orange-green glow, was coming down the stream in the wind tunnel, and if there was a shock wave, it would show a shock wave. So flow visualization was an area that I spoke to.

And finally the various kinds of research that we were doing, which was the drag of forces on spheres. I had--later, I think--yes, it was. Later I did a major program on the drag forces on cylinders but also drag forces on flat plates. Basically, you're doing the aerodynamic forces on standard objects. Space stations are essentially made up of spheres, cylinders, and flat plates. And so that's what we were doing.

Besides the research, I always threw in part of one of the lectures on our educational system and how we operate. They were very interested in how we got money for research from the federal government, things like this. Now, Germany, especially Aachen, is in one of the wealthiest parts of Germany. They get money from the state, and they also get money from the province, and since the province was rich, why, they do very well. But if you go to other provinces which are up against the Russian border, which they were in those days, the province doesn't have money for such things as space research. They will give money for agricultural research and so on.

Well, after this applause died down, I then saw the German system at work. The call went out for questions, and of course the people put up their hands. The people in the front row, who had professor titles, would be called one by one, by rank. Schlichting was the first, and so on. They went down the line. And then they would go to the second row, and then they'd go to the third row. By this time, you were starting to get into graduate students [chuckles]. A lot of time was taken up in questions and answers. It was just amazing how the hierarchy worked in that whole system.

Schlichting later went on to become the professor at Goettingen, a university over near the Russian border. He asked me back to Germany later. I worked with him on research proposals, writing research proposals for his state and also for his province.

### Thirty Lectures in Six Months

Maslach: But that kind of excitement was repeated in France, where I gave four lectures over a two-week period in Paris. And I followed J. Robert Oppenheimer. I spoke in a small auditorium. His lectures were first organized to be in the small auditorium, which I used, but they were so heavily publicized and so many people wanted to hear him that they had to move to a major auditorium. They had a real riot in the Sorbonne, when he spoke the first day, just to get seats, get tickets.

So I spoke there, and I spoke at various other places in Italy and France. In Rome I spoke in a building that was designed by Michelangelo, right near the Colosseum. It had been a church building. When I was lecturing, there was a knock on the door. It was Easter week. The man who was the master of ceremonies, the professor there--he went and there was some whispered conversations at the door. In came a priest and two altar boys. Basically, they blessed the room, which was a procedure which was done throughout Rome, and in south Italy, in fact. And so when I was ready to talk, the Italian professor said, "Your talk has been brilliant up to now, but it will be better because you have been blessed." [laughter] All of these people--a lot of officials, from the Air Force and so on. A lot of government people involved.

We went from one city to another, and then we had times out, when we were able to be by ourselves, and I was able to do more thinking. I wrote two papers during that time [laughs] and gave one of them at the World's Fair in Belgium. There was a technical meeting. So it was just an exciting period of our life. The children really grew up.

### An Exciting Holiday for the Family

Swent: Do you want to give the names or the titles of the papers?

Maslach: Oh, no. I can't even remember. We started off this big trip, actually, with a skiing holiday in Austria. We had this car. I picked up the family in Genoa. They came over on a ship. We went from Genoa just to Bologna and then took a train up to Innsbruck and over to St. Anton. In those days, in 1958, ski school--one morning or afternoon session--a ticket was essentially twenty-five cents per hour. When you put your children into the ski school, they essentially were being taught



by members of the Austrian ski team. It was a babysitting operation because you never saw them; they just went off and did their thing. You saw them at lunch. So we had ski lessons, babysitting, etc., for essentially one dollar each for this and fifty cents for lunch. It was a great time. They are now all expert skiers.

After skiing was over, we would take off our boots and take our skis and leave them at the slope, and then with after-skiboats we would walk down the main street of St. Anton. Along the sides of this village were just dozens of coffee houses. You would go in and the children would have hot chocolate, which was just wonderful, and we of course would have coffee, and they would have all of these wonderful, filling, caloric pastries. You never saw pastries like them, at that time. They always would ask, if you came in, "*Mit schlag?*" meaning did you want whipped cream. Whipped cream--they took this huge spoon, about the size of my hand and scooped up this whipped cream and slapped it down on whatever pastry you had ordered. This was before dinner [laughs].

We were in a little ski lodge in which the young women--high school girls, essentially--were doing the work. In the early morning we would wake up to their singing. They would sing in chorus, together. It was just as though we were in a church, listening to the choral group singing. So we had a marvelous time there. We just had a lot of fun.

One funny part was I was a pretty good skier, but I wanted to improve, learning the Austrian technique. The head of the ski school, named Rudi Matt, brother of famous Toni Matt. So Rudi said, "Go up there and do a few turns." So I would go over there--it was a little hill--and so I climbed up and I raised my pole and he looked at me, and I did a few turns. The hill was just perfectly manicured. The snow condition was just absolutely ideal, so I did a lot of good turns.

I came back and he said, "Oh, you're good." He said, "You go with Egon," and I went with Egon. So Egon gives me a little wooden token and tells me we would meet at Gimsel. I found out that Gimsel is the very top of the mountain, and so I go up on the top of the mountain with a lot of other people in the big ski lift. When I got up there, there was a little hut. And you go in the hut and you can order all kinds of things to eat and drink. Early in the morning, everybody was having *Tee mit Rum* [laughs] So anyway, Egon came and he started--he just gave us numbers one, two, three, four--you know, *ein, zwei, drei*. And down the hill he goes. And you follow him, in that order. And then he's constantly looking back over his shoulder, and then he

stops and gives criticism. This was the technique. Well, fortunately, I was around sixth or so. There were about ten. By the time I got behind him, we were down into another area. He was giving minor criticism of something.

In the ski class was a wonderful young woman who was Swiss. When she found out that I was a professor and doing all these things, she pointed out a sign in the ski lift, "constructed by--engineered by"--the name of the man was given, but in front of his name was Herr Doktor Engineer. She said, "Now, if you were here, it would be Herr Doktor Engineer Professor." [chuckles] This is much more important in the scientific fields in Europe than it is here. We had a good time. She was my translator, actually. She spoke perfect English, plus French, Italian, German [laughs], everything.

We had that kind of a holiday during that six months. We visited areas. Doris had found some books which were put out by an organization in Baltimore for State Department workers and their families.

Swent: Calvert School.

Maslach: Calvert School. We had several of those books with us. They would give lessons in art, and there was the art right in front of us--and when we were in Italy and France and so on. They had books on the history, of course. The history was there because there would be all kinds of displays. The church was prominent in all of this history of Europe. So they had a very fine education abroad.

What happened was when we came back, none of them lost time, and one of them was kicked up [laughs]--skipped a semester. It was not a loss as far as the family. Of course, knitting the family together, it was a fantastic experience. We just went through all of these nations. Everywhere we went, we were greeted at first by academics and we were at all kinds of social events. It was kind of heady for a family at that time.

My research work really paid off in developing the social activity that we had when we were in Europe. We met many families and stayed, and became close friends with them. For example, the Deviennes [Marcel Devienne] in Nice. He had done research in this field in physics for his doctorate. He had a private school. We got to know them very well, and their children. We still see--in fact, we saw Jaqueline recently, they split. She is no longer Devienne; and has remarried. But the wife was here, oh, a couple of years ago.

A Quantum Leap into International Research ##

Maslach: Marcel Devienne. Anyway, we just kind of went into a whole new life, international research. From then on, '58, our research was not just from the ONR; we were working for the Air Force; we were working for NASA. We just took a quantum jump in activity. This was a big push from the United States at that time. We were in conversations with people everywhere.

We established a technical organization, an international one. The first meeting was in Nice in '58 and then every two years thereafter. We had meetings in Nice, Berkeley, Oxford, and other centers of research.

Swent: What did you call the organization?

Maslach: Oh, I'll have to look it up. [laughter] It was very informal, really. It was just people who were working in the field. But it was rarefied gas dynamics. We put out our volumes of papers every two years, and we went from Nice to Berkeley to Paris to Oxford to Ottawa, Canada. Just had meetings everywhere. I lost touch with them because nowadays I have moved out of that field, but it was a very exciting time, is what I'm trying to get at--right in the middle of Sputnik.

We came back, of course, to the United States, which [chuckles] was kind of a letdown after living out of a car, our little Mercedes, the three children in the back and my wife and I in the front; we just had a wonderful time, going from city to city and finding a place to stay and so on.

The research activities were wonderful from then on, from '58 until '63, when I became dean. Just five years of hard work, teaching and being involved in all of the academic affairs of the campus. The previous years, from '54 to '58, having been appointed associate professor in '54, this was one of my decades of activity, which was different.

"A Standard Berkeley Academic Family, Very Involved"

Maslach: It's hard to say just exactly what happened in those years from '58 to '63 except that it was just a big period of being an academic. The children, of course, were growing up. Christina had gone from twelve to seventeen; graduated in the early sixties from high school, where she was an outstanding honor student, and

went to Radcliffe for her undergraduate work. At that time, Radcliffe was separate from Harvard administratively, but you took all your classes at Harvard.

The boys were growing up. Jamie was quite an athlete--marathon runner and so on. He, more than the other two, really latched onto the High Sierra work that we had done in that period. When Jamie was about nine until college days, why, he was up in the mountains all the time. In the beginning, with me. And once he had learned how to take care of himself in the mountains, why, he used to take kids from high school on trips up to the mountains, hiking all over the Sierras. We took him one time, Doris and I, to the lower end of the John Muir trail, and then he hiked the entire length of the John Muir trail, at high speed because he is strong in the legs.

Steve had moved along at his pace. He had decided he wanted to go to high school in San Francisco, so he took the examination for the private high school, Lick-Wilmerding. In those days, they would take the first top--whatever--sixty people or so, and he was one of them. So that period in there, I was driving him down early in the morning so he could catch the bus over to San Francisco with other people who went to Lick-Wilmerding, and then I'd pick him up in the evening. That meant that I would always get into my office early [chuckles].

We were just active in everything. Doris's activity, of course, was in the political realm. We started doing that in 1950, when we first moved over from San Francisco. But there were elections every year for council or school board or something. Eventually, we turned the entire school board around, she doing most of the work. But in the early days, both names--my name and her name--would be involved because that's the way the PTAs operated, with a co-presidency, for example. I would help gather votes here on the campus because I was beginning to become known. She, of course, would work her system outside. Very well organized.

Just a standard Berkeley academic family. Involved politically, locally, and very involved in research and the other activities. The campus, of course, was going through lots of changes. You have to go back and try to remember. This was before FSM [Free Speech Movement]. We had people like Clark Kerr as chancellor, and we also had Professor--chemistry--Glenn Seaborg as chancellor. Then, when he went off to the AEC [Atomic Energy Commission], why, then we had Ed Strong as chancellor. The expansion period for the University--new campuses--everything was going on at that time. It was an enormously active period, the fifties.

Swent: Yes. The new campuses--up until then it had only been Berkeley and UCLA, right?

Maslach: That's right, at that point. That's all.

Swent: In those years--

Maslach: Well, Davis and Riverside were large agricultural research stations. They had enough room and were close to populated areas that they became campuses. And then, of course, in the period that we're talking about--'58--it was one of the big years in which things got organized in higher education. The master plan of higher education came into being at that time. We ended up with Santa Cruz as a university. We took over Santa Barbara from the state system, and they took over a campus, the Kellogg-Voorhees campus, south. It became a state college. Then, of course, we went further, later, into other campuses. But it was a big period of expansion.



## VII THE COLLEGE OF ENGINEERING CHANGES ACADEMICALLY

### Dean O'Brien Sees the Need for Five Years and Research

Maslach: I want to then speak to the changes that occurred in this period. The College of Engineering was going through a separate academic change. Few people remember or probably even noticed, but Mike O'Brien was chair of a committee in the American Society of Engineering Education, which published a short, terse report, which was the changes that were necessary for engineering education. This was actually work that had started earlier; it started earlier than Sputnik. But Sputnik did a lot to energize this whole movement.

That short report, which I think is the cornerstone of engineering education for the nation, basically said professional engineering education requires that you have another year, a master's degree. This is common. Public health--there's a master's degree in public health. If you go to any of the professional schools and colleges--master's degree of business administration. It's not just enough to have the bachelor's degree; you needed a graduate year.

This got pushed, and the concept of doing research in the engineering sciences and the practical application of engineering to problems all started about that time. It was only about a five-man committee. I always remember reading that report--

Swent: This was across the whole nation?

Maslach: Yes, American Society of Engineering Education, which people thought of as a very dull society and rather organized to undergraduate education only. But he was part of the first official graduate movement. He was pushing that here in Berkeley, even before that by his appointments of various people. Some of the major appointments of people that I have known and talked about were made at that time. He wanted to start Naval

Architecture--move that and make it bigger. He was able to get the top man in Naval Architecture in from the navy, "Packy" Schade. There were only about three schools in naval architecture. He made this one a major school of naval architecture.

Swent: We had talked a little bit about him.

Maslach: There were other people, like Harmer Davis, Earl Parker, and all those--and John Dorn, who was a prolific researcher and graduate teacher. That's the period, of course, where a lot of other people suddenly became important. One of the people, Sam Silver, together with John Whinnery. Don Peterson came. There were just all kinds of new looks in each of these departments. We picked up quite a few of those people, as I said, before '58, but it went on.

#### O'Brien Retires from the Deanship and the University

Maslach: The big change that occurred in engineering locally, officially, was that Mike O'Brien decided to leave the deanship and to actually retire from the university. Now I'm going to tell you my version of the story that I heard from other people at that time. It might be a little disjointed because my sources came at different periods during this time. But I became dean in '63, and John Whinnery was 1959 to 1963.

Before I went on sabbatical leave, I remember meeting with Mike O'Brien because he and I saw each other quite a bit in the operation of the Office of Research Services, which I described earlier.

Swent: You mentioned your streamlining the processes of getting contracts.

Maslach: Loaning the money to John Whinnery and Sam Silver; I always remember that.

I remember walking across the campus with Mike after he had had a meeting at the Faculty Club with the faculty of the department of mechanical engineering, of which I was a member. He was describing to me essentially what had to be done. What I realized was that in the department, there were two stratas. There was the group of faculty, much of them older, who had come through engineering when it was a four-year degree program, and



who had taught in a four-year degree program. In other words, their whole life of engineering was a four-year degree.

And now along comes the dean and says, "We've got to go to a fifth year and graduate work in research." Mike expected some of these people to just change over and become researchers. That didn't happen. That just did not happen, especially with the older people. And so there was a need to get in new faculty. Some of these people I just mentioned, the superstars, came in about that period of, oh--some earlier, some later.

Mike in my mind never knew precisely what had to be done. What had to be done, of course, was to bring in some new people and to start a whole new program. He understood the need to get more graduate students and get that as the vehicle for the change in the whole program. I must say at that point I couldn't understand why we were doing all of these things because the other thing that Mike said we had to do was to go from a one-department college to a multiple-department college.

Well, we were kind of departments, but we were not departments. We did not have budgetary control. We were divisions. We were divisions of the department of engineering, which was under Mike O'Brien. He was chairman and dean. He had total control of everything.

Now, the story as I understand it--and I think it's the way it went--there was enough rumbling of various people, at first within engineering and also outside of engineering, in the other colleges and schools, of this operation Mike O'Brien was having over here in engineering. Engineering was 12 percent of the campus; you couldn't ignore it. And they were not organized in departments, and they did not have the leadership coming through as it would, say, in L&S [Letters and Science], where you had forty, fifty departments and all kinds of chairmen and leaders coming through.

So the operation of the Academic Senate, which requires professors from all areas to be heavily involved in the Senate was stymied by Mike O'Brien. As I think I might have said, I went to one of his first meetings when I was appointed and heard that we should just ignore the Academic Senate. He had had some bad problems with getting appointments and promotions through the senate process, the budget committee and the chancellor. I did not know any of this at the time.

But obviously, Clark Kerr as chancellor had a meeting with Mike O'Brien and said, "We have to reorganize, and you have to

change your method of operation." Years later--that's where we get disjointed--

Swent: You mean the College of Engineering.

Maslach: College of Engineering, excuse me. The College of Engineering had to be reorganized. Years later, when I became dean and I was able to talk quietly with Frances Woertendyke, one of our first meetings, in fact--it was before July 1, when I was officially to take over--we were sitting in Mike's old office, and there's this little old wooden desk. As I might have already said, I opened the drawer, a file cabinet drawer, and a rich smell of bourbon came out of that wooden drawer. I had a look and I said, "There's a story behind that."

She laughed and she said, "Actually, it was on a day like this"--a dark day--she said, "I knew Mike was there. It was after five o'clock. I just knocked on the door and came in, and he was sitting there, with his famous scowl, "Black Mike"--no lights on--having a drink of bourbon." So she went and got a glass and joined him! He told her the story that he had been told--ordered--by the chancellor to reorganize the college and make it a multiple-department college.

And that's when he decided to quit. He didn't quit immediately. He went through the process of reorganizing the college and then left, with John Whinnery becoming the dean. So that is, quote, "the story" of why the College of Engineering went from a one-department, a one-manager operation to a multiple-department college. I never confronted Clark Kerr with the story, although we were good friends. I'm sure he has his version, which is not much different because he admitted in later years how much Mike O'Brien did for engineering as a whole.

It's hard for me to translate to you all these differences that were going on. Here we had these national, international differences of science; the Cold War and Sputnik and the race for space. I intimated to you the race for essentially military control of space, using weapons. And then, on the other hand, here we are in the state of California and we're expanding the University of California like mad, and then down at the campus level we're reaching maximum numbers of students and were having internal space problems and all these things.

And then here at the college level, we were told we have to go into multiple departments--one, and then we had to go into graduate work to a much larger degree. I mean, there wasn't one phase of my life that was left sitting still. Everything was moving. Everything was just get going. Of course, for me, the

kids were getting into the teens. This was a whole different period of living as far as we were concerned of going off to college. So everything was moving like mad.

Swent: You had also built a house.

Maslach: Yes, a rental unit in '52. We built a second rental unit in '54, and we built our house in '56. So just think of all of those things.

Swent: That's a lot.

Maslach: The fifties was just a fantastic growth period for the family, and change for the college and growth for me.

Swent: I don't quite understand why setting up departments in the college was such an issue. Why was that?

Maslach: What happens when you set up a department is that the chair of the department has budgetary control over his share of the total budget for the college. He could sign off. As I told you, there's a little card that says, "Signature authority." It tells what you can sign for and what you cannot sign for. Can you buy a box of pencils or can you not? This means that now I can go out and start searching for faculty. I can present names of faculty to then be approved by my department, my college, and so on. So instead of one person being the chair and going out and--

Swent: The dean of the college.

Maslach: He was both dean and chair, so he was able to bring in people. He found people himself. He was a one-man recruiting team in certain respects. Not all of his hires were good, but a lot of them--I gave you some names--were very good.

Swent: So setting up departments does put a layer of authority--

Maslach: The dean's layer of authority is above that. The dean has to fight the rest of the campus for budgetary resources, and he has to do other things. I will get into that when I was asked to become dean.

Dean John Whinnery and Chairing the Dean's Coordinating Advisory Council

Maslach: The period of John Whinnery's deanship essentially extended at that point until 1963. There was an interim dean, Bob Wiegel, between 1957 and 1958. Let me kind of answer your question about all this problem of organization. Why was it such a big thing? Well, in the old days, you might see Mike at the Faculty Club or you might see him having coffee when he was here. He was half-time, remember. Always keep in mind he was only half-time.

Swent: That's right.

Maslach: I would see him every once in a while, maybe only three times a year, whereas now, when John Whinnery took over, he set up a Dean's Coordinating Advisory Council. DCAC. This was modeled after the chancellor's equivalent. At the chancellorial level, he met with all of the deans as well as all of the directors of research institutes--maybe thirty people--as well as top business leaders in the business office.

You would meet weekly, so you got to know what was happening, what the issues were, what are we going to do. We discussed it. The chancellor, of course, was in charge, but he took advice from people. Same thing with the deans. We discussed all matters of import in terms of the curriculum, the advanced degree work, research activities, the space development (which was a big thing), and buildings. If you look at Engineering--just go outside here and just look up there, you've got that monster of a math building, but there is all kinds of new building work being considered, that were developed during that period of time.

It went from a one-man shop, where you usually got your information from talking to Frances Woertendyke, to a multiple-man shop, in which each discipline and each organized research unit was represented in these weekly discussions. This was the biggest single thing that happened in the reorganization.

Swent: This happened under Whinnery?

Maslach: Well, it was started under O'Brien. I give him great credit because he really stuck it out and really followed through on the orders from Clark Kerr. He did a wonderful job of setting up this structure.

The period under John Whinnery was a transition period. We were all kind of hustling around, doing these things, and putting

out proposals for what we wanted to do as a department. Within mechanical engineering, my own department, we had been further fractionated with groups in engineering design, heat transfer and fluid mechanics, applied mechanics, and so on. We were not really a single department. To some degree, this continued, but we did organize ourselves into a single department, a single identity, in this whole thing.

It was really, as I say, a creative period. There was lots of steps backward and forward. It wasn't all just "Excelsior". We went up the cliff, you know. We just did all these little things.

Swent: And a lot of personality adjustments, I'm sure.

Maslach: Yes, the personality adjustment, going from basically an undergraduate activity to something which now is basically a graduate activity. We were right in the middle of this whole thing. The problem of changing curricula, of course, is that it takes time. You change curricula in time with the students that we get. That meant we had to go out and recruit students at the graduate level. We had not really done this before. We also had to look at our own undergraduate students as potential graduate students. This was never pushed hard before. There was kind of a change here in which graduate teaching and activity was dominant now because it was in our thoughts all the time. We taught our undergraduate courses, but we were thinking what we wanted to do in graduate work.

The period, as I said, under John was essentially everybody kind of getting readjusted to this new organization, working within their own departments to a large degree, as they were organized, and learning how to operate with a budget, which a lot of people didn't understand. In fact, I hate to tell you but all through my deanship and provostship, I could point out to you departments that really did not have any idea of how to operate within a budget. They never knew what budgetary controls there were. They just thought they could take this money and use it here or there, but you can't. So you have to learn an awful lot about the operation of the university as a whole, especially the business side of the operation of the university.

I got thrust into all this, of course, at the college level because I was director of the Office of Research Services. I attended all the meetings of this coordinating board and so on. As you can tell, I'm outspoken. If I have some ideas, I put them out. It turns out that maybe of twenty people on that DCAC operation, about ten really were interested in doing some things

and about ten were sort of coasting along and listening more than they were talking and producing ideas.

Swent: How was this council selected?

Maslach: It wasn't elected. It was the chairmen of the various departments and they were elected by their department. The directors of the organized research units were already in existence because these organized research units had been operating. It was a good way to reorganize engineering. There was no question about that. We had wonderful discussions with strong people--Earl Parker from material sciences and mineral engineering, and Don Peterson and others, Sam Silver from electrical engineering. There's Harmer Davis, Harry Seed, others from civil engineering. And mechanical engineering--our chairman was Sam Schaff.

Mechanical Engineering Department Chair Sam Schaff ##

Maslach: It's sort of late in all this discussion we've been having to mention Sam Schaff. It's rather interesting that Doris and I were over at the de Young Museum the other day and we ran into Sam Schaff and his wife, Phyllis. We hadn't seen them in some time. Sam and I were working together on the rarefied gas dynamics program from 1950 on, or from 1949 on is a more precise time. He became the senior research person because he took over from Mike O'Brien and Richard Folsom, who kind of gravitated away from research activity.

So he and then later on Larry Talbot and Frank Hurlbut, who was in the program, became the leaders, along with me, of course. Sam was trying desperately to reorganize mechanical engineering when he was chairman of the department, but he had a difficult job because there were such strong feelings in each of these different groups. Applied mechanics and engineering design were really always at odds. So we in heat transfer and fluid mechanics were people trying to bind everything together [chuckles]. It was difficult for Sam.

I remember there was one vote, essentially, which was on a single-department matter. The vote was almost even; there was one vote more for this than for that, and so he was never given a mandate to do the various things within mechanical engineering. He struggled, and he achieved things [chuckles], but it was a wonderful example of this transition from undergraduate teaching to graduate teaching. All the graduate students were in two

areas over here, and all the undergraduate students were over there. Really, this is the way it was. So there were schisms, and all these schisms within the department had to be repaired during this period. That's the legacy of Sam Schaff and John Whinnery, dealing with this reorganization and making it finally come to pass.

None of us realized that John Whinnery had no desire to stay on in the deanship. In his oral history, as you probably noticed, he had an agreement with Ed Strong that he would be the dean only for four years. I always remember that at the end, we were all getting kind of nervous--first, because we never saw any activity by Ed Strong or anybody at the chancellor's level in terms of searching for a new dean outside, and nobody inside seemed to be knowledgeable about anybody being proposed within the college.

I had thought immediately that Earl Parker or somebody like his stature would be the next dean when John did say that he was going to resign. We had meetings after meetings, in which--this is now the last six months of the year--and you really should have a dean taking over in July 1 already known to everybody on January 1. And nothing had happened. We saw no motion, no activity. Usually, you know when somebody is searching because people write you letters and ask your opinions and want to know about this or that. So we were all in the dark, and we were really worried.

I can remember when John and Sam Silver would be talking about this. Sam in many respects was a very interesting fellow in the development of the college and certainly one who has never been recognized for his input. He for many years was chair of the confidential committee, basically a budget committee, of the College of Engineering. The budget committee on campus here is a kind of misnomer. On other campuses they call it the Academic Personnel Committee. It receives the cases for appointment, advancement, and promotion and then sets up ad hoc committees to review the proposal and then advise the chancellor. That is its function: to advise the chancellor on these matters. Should the person be appointed, advanced, or promoted; or should he not?

Sam's committee internally did yeoman work. It had a lot of people being proposed. The cases were presented with this awkward one-department division arrangement, through Mike O'Brien and down to the chancellor's office, where the budget committee exists. Under Glenn Seaborg and probably under also Clark Kerr--but I do know Glenn Seaborg's period very well--and also for a few years under Ed Strong, our record of getting our appointments

and promotions was abysmal. Approximately 35 percent of the proposals we made were honored.

Chemistry--the college of chemistry is right next door--I later learned were given approvals, like, 100 percent, or 99, 98 percent.

Swent: You mean they were being approved--

Maslach: By the chancellor. I didn't know at this time, when John was dean, that this was the situation. I knew that we were not doing well because I was made a member of this internal committee with Sam Silver because another member of the committee had ignored the anonymity and the confidentiality and spoke to a man who was up for promotion in derogatory terms, publicly. It was a bit of a scandal for a few days. And Mike just appointed me as a member in place of this other fellow.

So here I was, an associate professor, reading material on full professors [chuckles]. I, of course, had been on ad hoc committees set up by the Budget Committee--a few, but not many during that time, so I kind of knew how the process worked in general. But I didn't know how it worked in detail. But what I *did* learn from Sam Silver on that committee was what a tower of intellectual strength that man was. He had, to me, I think the finest judgment of the worthiness of a new applicant, whether that person would make it or not. He had the best measures of whether this was adequate for promotion. To me, he was sort of the hidden dean for academic personnel, all these years that Mike O'Brien was dean. And, in a way, John Whinnery. He was the person in the back row, reading these reports and saying, This man should be or This man should not be.

And so we worked on this committee and read these reports and proposals. I really learned a lot about Sam Silver. I always treasure the fact that when they named the space sciences lab up on the hill for Sam Silver, his family and also the people up there asked me to be the keynote speaker. I spoke, and when I got to the very end, the tears were running down my cheeks. I was trying to speak and cry at the same time. I always was close to Sam, and had a very, very nice relationship. It came from being on a committee together. But he truly was one of the cornerstones of this college in ways that people still don't understand.

Swent: The work behind the scenes.

Maslach: At the end of John's period as dean, he truly made sure that he was going to leave. He sold his house. He was going to the ETA



in Switzerland--I won't give you the full name because I don't remember it myself--but it's a famous research organization in Switzerland. He had made arrangements to be over there. He was on sabbatical leave; he had that all approved. And there was no new dean. I'm not kidding! This was getting to us. March came along--February, March. And all we were doing at these coordinating meetings was "Have you heard anything about the deanship?" "Who--"

Well, rather late in the game, Ed Strong took a trip throughout the United States, a quick trip. There were several people he wanted to see about this deanship. Somebody, obviously, he saw in the Midwest said, "What are you doing? You've got the best dean there is in John Whinnery. You've got all kinds of people--if I had the number of leaders here that you have at Berkeley--" He gave Ed Strong kind of a little lecture, Ed Strong being a professor of philosophy. A wonderful, wonderful fellow.

It basically was, you go outside for a dean if you want to make major, major changes, and there are personality problems that you cannot deal with inside. But if you've got strength inside, you work from strength. "What are you searching for? Go back and search within the college."

Swent: Did Strong tell you this?

Maslach: Yes, he told me this later, when I became dean. I remember he mentioned other names. He mentioned, again, Sam Silver; he mentioned Earl Parker and, I think, Harry Seed. You know, there were a number of good people in the college. Some people would not take it, incidentally. You don't automatically take the deanship or a chairmanship; you can deny it. So anyway, we heard about this and we heard from these various people that he saw. We didn't hear details, but we knew that he had seen so-and-so here and so-and-so there.

The term ends. The teaching ends in May [chuckles]. So we had a meeting one more time. I just seemed to be more eloquent than usual at that moment. What bothered me was that I didn't think that anybody on the other side of the campus--the chancellor's office, president's office, anywhere--really knew what they had in engineering. I thought I knew, with my experience with Mike O'Brien, John, and all the rest--administratively.

But I also knew academically how good it was. And so I said, "I just don't think they know what is needed. Basically, they don't know engineering. All these years, they were kept in

the dark by our organizational methods, and they just don't know. They don't even know the people that we have." And so the decision was made by John that we send a committee to meet with Chancellor Strong in his office and present the case for the college: what it needs.

I was a member of the subcommittee to go down to meet with Ed Strong. Packy Schade, Harmer Davis, and Sam Silver were also members, but I'm not sure of some. But Harmer Davis, Schade, Parker, and myself, those I'm sure of. We went down. As is my technique, I try to organize my thoughts ahead of time. What I do is take something about the size of that cassette over there-- a card--and I just jot down words that are key words that I want to emphasize in the presentation.

I was, of course, the youngest person there. Schade, with his great career during the war and work here; Harmer Davis and Parker. They were the giants. We went down there. We got into the office, and Ed--

Swent: You said "down there." Where was the office?

Maslach: The office was in Dwinelle Hall. Ed Strong was a tall, strong man--no pun intended. Rugged, lanky, Scandinavian type, if I could put it--big, bushy head of hair and so on. I knew him from the Faculty Club and also some committee activities in the Academic Senate. We sat down, and he in his way--he started lighting his pipe and said, "Okay, you called the meeting." [chuckles]

That was the greatest example [chuckles] of one person trying to outwait the other. So Harmer took the lead. He just gave an overall view of the moment, how we were really, basically, without leadership; and what we needed was to get something quickly. And someone from the outside would mean months to learn the ropes inside. I think Earl Parker talked much more about the fact that we were trying to do all of these things, and we needed to get these activities moving with the signature of the dean in order to move the things to the chancellor and so on--in terms of new buildings. He spoke a lot in terms of the building and renovations and so on.

Incidentally, he also died not too long ago.

Swent: Yes.

Maslach: Very sad. But Pat Schade was just a quiet person. He didn't say anything, really. And so people turned to me. These previous statements had been rather short. I think I got my emotion up.

What I was doing was I was telling Ed what a jewel he had in the College of Engineering, how good it was, that there was so much leadership and so many people. I just made kind of an emotional plea for the operation and the leadership in terms of all the things we had done in the last few years, under John Whinnery and O'Brien, and all kinds of things were waiting--who is the new dean going to be?

When I finished--and mine was the longest of the three statements--he said, "May I have a copy of that?" I looked at him. I said, "Ed,"--I flipped my card, which was a three-by-five card, and had four words on it. He says, "I'd like to get that because I could use that information."

I said, "I'll go back and try to reconstruct it." So I went back and I dictated what I thought I had said. We typed it up, and the next day we sent it down to him.

The budget committee--the ad hoc committee had come up with a list of names of people that they thought would be suitable as the dean of engineering. I didn't know about this being in the works. I knew there was some process, but I didn't know how he, Ed Strong, was getting his advice.

Much later I learned that people like Parker and others were obviously on that list. In fact, I still think--I'm pretty sure that Parker was number one on that list [chuckles]. He kind of fitted just what we needed. He had the dynamic energy, and he was a researcher. He did a lot with graduate students. He was certainly not in any political activity within the college. He moved along as an independent in a small department so he had no affiliations, I would say, in that regard--political affiliations.

#### Chancellor Strong Offers the Deanship and a Triple Mandate

Maslach: About, oh, a week or so later, I got a call from Ed Strong's office. Akiko Owen was the secretary-office manager. Wonderful, wonderful woman. I saw her not too long ago. It brought back a lot of memories. She in her wonderful Asian fashion made me aware that this was an important meeting. He really wants to talk with me. I was actually dressed in casual clothing [chuckles] in the research laboratory. You get dirty in that wind tunnel.

So I decided I would go home and have lunch at home and called Doris and said I'm coming home for lunch and I have to change for a meeting with the chancellor. And so I changed clothes, and I had slacks and sports coat and so on, and I went down there. That was about three o'clock in the afternoon. He had a wonderful little office. He had two big chairs on one side of a cocktail table, a low one. He would sit in one, and on the other side was a loveseat or a Chesterfield, not a single chair but where several people could sit.

I sat opposite him. He and I were pipe smokers. He had this technique of always starting by quietly filling his pipe and getting it ready. Would put the pressure on the other person [chuckles] to say something. I wasn't aware of this technique until later. I was just making small talk, talking about the hearts game up at the Faculty Club, which he used to watch, and play every once--rarely, but--his game was bridge and, to a lesser degree, cribbage.

So we were friends beyond the usual academic relationship of two professors. He just came right out--after puffing a big cloud of smoke, he came right out and said, "I want you to be the dean of engineering." I must say, in all honesty today, I did not expect him to say that. In no way did I ever expect to be offered the deanship. I was not a chair of the department. I was not the director of an organized research unit. I was operating the organized research unit known as Office of Research Services. I was doing my research; I was doing my teaching. I had all these activities.

Well, after that bombshell kind of technique, immediately I said, "Well, you know, you've got my material."

He said, "Yes." He said, "Basically, what we want to do is for the College of Engineering to finish this reorganization and get moving." I'm leaving out a lot here because I can't remember the details he gave to me, but the important thing was summed up at the very end, in which he said, "There are three things I want you to do:

"Number one: Reorganize the bachelor's degree for engineering, which is an abomination--it's a four-and-a-half-year degree. You require those poor students to take four-and-a-half-years' work, and you give them a four-year degree. Get it in line with the Academic Senate requirements for a four-year degree."

To put that in perspective, basically, you have so many units each semester. Four years comprises so many units in

total. We were just asking for more units of work to be done than four years' work should be. He was right. It turned out-- the proof of it was that most of our students stayed for four and a half and five years before getting the degree. That was the first thing: to have a true four-year degree.

The second thing was--"What we want is to have the finest college of engineering in the United States. We want to be number one." I didn't recognize what importance that was to him and what he meant by it, actually. I had known that we were quite good, but I never knew about number one, number two, and so on. And so I nodded my head.

And the third thing that he wanted me to do was to get the College of Engineering involved in the Academic Senate. I told you that at one point I heard Mike O'Brien saying he used to ignore the Senate. And here the chancellor was giving me the other side of the story. If I may dwell on this for a moment, I immediately got to work on this because it was fairly easy to do. By the time I left the deanship and became provost, the majority of all the committees in the Academic Senate were chaired by engineers.

When I was provost, [Chancellor Al] Bowker was asking, "Who should we have on the special committees?" He said, "How about the chairs of the Academic Senate?"

Rod Park, who was the provost for L&S, said, "No, we can't do that."

Al said, "Why not?"

And [chuckles] Park said, "Because all the chairs are in engineering." [laughs] It was true. That kind of a committee would not have worked; it did not represent the entire campus.

So I was quite successful in getting the College of Engineering to move into the Academic Senate. I spoke to it at length in time, and I proposed people. I learned how the operation worked. I learned about the committee on committees. I learned how to make recommendations. I did all these things. Part of the process I knew, but part of it I didn't know until I had to use it.

The main problem, of course, was to make the College of Engineering number one in the United States. That was a real job.

Swent: Quite a mandate.

Maslach: I have to remind you, when I became dean, '63, what was happening nationwide: They were having elections in '64. Remember all these dates?

Swent: I do.

Maslach: Do you remember the Free Speech Movement?

Swent: Absolutely.

Maslach: The sixties. All these things were real problems.

Swent: Sixty-three was when Kennedy was assassinated.

Maslach: Sixty-three, that's right. But the point was here: I didn't realize when I became dean how I would immediately be involved in a whole new level of activity, which is campus-wide. The Free Speech Movement did that, in large part.

#### Changing to a Quarter System: Problem with a Silver Lining

Maslach: Another thing that was happening, which nobody remembers: We went on campus from a semester system to a quarter system. This was a proposal by Clark Kerr as president. Basically, the concept was to make greater use of the campus's physical facilities by having a true four-quarter system so that there would be courses taught all year 'round. We would not have to build as many buildings and new campuses if this was true.

The concept had a lot of merit. Don't dismiss it quickly. But to move from a semester system to a quarter system was a massive undertaking. Fortunately, it was a wonderful problem which had a silver lining. We had to reorganize the curriculum. Guess what? The undergraduate curriculum was reorganized. As dean, one of the things I said was there has to be a true four-year curriculum. In the transformation from semester to quarter, I solved one of the demands that Ed Strong gave me.

But what happened basically was this enormous load of external work. You were now a member of the Chancellor's coordinating council. They had problems, major problems. And I was sitting right in the middle of the whole thing.

Swent: What were their problems?

Making the Major Decision

Maslach: I want to save that for a moment and just kind of say what happened and how I reacted to this offer of being the dean, and the family--what their reaction was--and my friends. And people like John Whinnery, who heard about it immediately, of course.

I discussed the whole thing with Doris that evening. I said I was just absolutely flabbergasted. I did not say yes to Ed Strong at that first meeting. I said, "I want to think about it." We discussed it at home. Talked with the kids, even. They didn't know what a dean was, maybe, but they knew that it was a big step up and stuff like that. We just had a lot of good discussion on it.

The next morning was, I think, a Saturday. I said, "I'm just going to go out and drive and go to the boat and think." I just suddenly, by myself, drove over to Marin County. I was just driving. I had this little Mercedes--sports sedan, a nice car to drive. And I would be thinking and driving and thinking and driving. I ended up halfway--that was almost like Sea Ranch or something. When I finally found out what time it was, I started thinking about going back. So I drove probably a total of five or six hours. Had lunch and so on. Thought about everything.

It was a major decision in my life, ranking right up with going to MIT during the war. But it was in certain respects bigger because I could not see myself doing the job without giving something up. This is a problem because while it is very easy and facile to talk about the educator-administrator, it's entirely different to do it and maintain your academic career.

Clark Kerr, of course, when he became president, never did any more research. Ed Strong did not when he became chancellor. You can see it today. This is one of the reasons people don't like to take these jobs because, as Clark Kerr says, the finest job in academia is a full professor at Berkeley--

##

Maslach: Clark Kerr said in a statement one time--it was a national speech. He said that the finest position in academia was to be a full professor at Berkeley, with no administrative duties. That, of course, is very true. If you are a true academic, you have your graduate students, you have your coursework, you have your research activities and you work in the Academic Senate--administration from an academic side--but you don't have those problems of the budget, those dollar signs, or personnel problems

of what should we do here and there, or development of space. You have to get out of your own sphere and move into another sphere, and learn about it. And so you really have to make a major, major change in this regard.

Amongst the changes that I made, for example, was I gave up competitive yachting. I no longer raced with one of the greatest boats in the United States on San Francisco Bay. Denny Jordan was the skipper-owner of the Bolero, which in U.S. yachting history, is one of the famous yachts. We had won championships for years in a row. Or the Volante, that I used to sail on with Doc O'Brien. No more of this big sailing stuff, out of the St. Francis Yacht Club, with all of the tension and competitive spirit and all of the social activities that went with it, including heavy drinking after the race [chuckles]. So this is one of the things I gave up.

What I did not realize I would have to give up was teaching and research, because the problems were much, much larger than I ever anticipated. But I tried for a year to teach a course, and that was impossible. It was a major course, which was wrong, to think I could teach it and be dean as well. The time schedule of the course--you're there at a given hour. You have to be there; the students are there. The time schedule of a dean--there's a crisis every minute. So you cannot juggle those kinds of schedules.

I kept up on my research and graduate students for a while, but even that started to drift off. This was my big mistake because I should have hung on to graduate students and research in some way. Later deans--Ernie Kuh and others--showed me what they did, how to do this. I just was not smart enough at that time to maintain research activity and dean's activity.

So I gave up things that later I really missed because I did like teaching. I'm a gregarious type, and I just liked to meet with students. So I learned about my deanship. After the end of the semester, John Whinnery was on his way out the door. I mean, he was gone.

#### A Month Spent Reading Faculty Files

Swent: Was there no transition period?

Maslach: Well, I think being on the Dean's Coordinating Advisory Council was sufficient transition. When you think about it, being on



that college budget committee with Sam Silver was a good transition. But I knew nothing, absolutely nothing about the budgetary side. I knew very little about what we had, really, in our faculty. So every weekend--Saturdays and Sundays--I would go down and would read the files. We had at that time 150 regular academic faculty. A file on each one can take hours to read. I didn't want to take files off campus. These were in locked file cabinets. So I would just go down there and study these things. I learned about the faculty. I learned what I had, in other words.

Swent: That's a lot of hours.

Maslach: Yes. There was a lot of disparity. As I told you earlier, there was an undergraduate faculty and a graduate faculty, which today you have on this campus. But at that time we didn't talk in those terms. People taught undergraduate and graduate courses. So I could see one major thing, and this was from my background with the budget committee of the college: the cases were poorly presented, one. Two, they were not uniform. A case from electrical engineering or civil engineering was better than mechanical and better than nuclear and better than industrial.

Swent: Now, when you say "a case," you mean a case for faculty advancement?

Maslach: Advancement or appointment. Anything. Advancement or appointment.

Swent: You're not talking about research programs, just people?

Maslach: People. But, you see, the case requires you to talk about their teaching, talk about their research, graduate students, and so on. So you make the case. And we had yet to come really to grips as a college with what was important in making a case, what the importance of the graduate activity was compared to undergraduate. This was still not in the minds of people.

This non-uniformity struck me right away. The cases were filled with all kinds of little personal notes and little backstabbing comments and so on. I remember one, which I thought was hilarious, this older man--engineering professor--sent a note to the dean on a little scrap of yellow paper, saying, "I just heard that Professor So-and-so in this department, on sabbatical leave, wrote a textbook. I don't think this meets the requirements of sabbatical leave." Well, a professional --one of the things you do is look at your activity, look at your field, and if you see there's a need for a textbook, look at what you

know and what you have, and what your lectures are, and make your own textbook.

One of the best examples was in chemistry. A man I greatly admired would give his lectures, and then take those lectures and build it into a book. He did it in a very efficient way, using a tape recorder. Amazing. A best-selling book, incidentally, in chemistry, for many, many years.

So I found all this junk in these files. I'm sure I violated all kinds of laws and rules and regulations. I'd read some of this stuff, and I'd take it and throw it in the wastebasket [chuckles]. They were just nonsensical personal bias. I spent that month, a lot of the time, transiting from being a faculty member to a dean. What I did was, I was doing research during the summer, which is my most active research period, and I was doing this night work, and I was doing this weekend work. I was really working seven days a week, eight hours or more a day.

That month is what really got me going. I realized that my style was entirely different from Mike's style. And Mike's style was entirely different, probably, from John's. I was much closer to John and wanted to go further in my administrative style.

Let's take a minute to remember that when I graduated from the University of California, I went to MIT, and within a matter of months I was heading up projects. Obviously, I had some administrative ability, even at that point. I told you that at some point around seventeen, eighteen I made a decision that my life would consist essentially of ten-year periods where I would make changes, move into new areas. Which I have been doing.

Now I was going into a new area. And so I kind of sat down in that office and thought through a lot of these things in terms of administration with personnel and budget matters, and then I needed a lot of help, a lot of strength in that area. Remember, the deanship with John and Mike was the dean and Frances Woertendyke in the dean's office, and that's all.

You go up to the dean's office today, and you'll be trampled to death by the number of people that are up there in that administration. It's just a very large administration. I'm not going to argue what is right or wrong because I increased the amount of administration, right at that point. Sitting there, reading those files, I realized what I had to do.

One Monday morning, I came in. I had a meeting with Frances. She had a stack of files right there on the desk. I

told her that I had come to the conclusion that academic personnel hiring and advancing of faculty was the most important job for me to do, and I was going to take over right now, and here are my ideas. Basically, you have a ladder system within the University of California. You have assistant professors, step one, two, three, four. And associate professors one, two, three. And you have to be promoted, at which point you get tenure when you go from assistant to associate. Or you're appointed as associate professor with tenure, or full professor. And then the professor goes up a number of steps and then goes over scale. Not many people were over scale at that point.

I just said, "I've been on a lot of ad hoc committees and I know what cases should look like, and I'm going to get working on this end of it. I'm going to start with"--and I picked up a pile of files that were there, and I took them into the other office. Now, I was told by Frances that she had ordered for me an approval stamp. I said, "What?" It had your signature, and then "I approve" underneath, printed. A rubber stamp. I had seen it before with Mike's name, but I hadn't seen it with John's name, but John used it.

I said, "I think I'm going to do things differently." I still have that stamp at home [chuckles]. I never used it. I later found out from people down in the budget committee, chancellor's office, that they hated that stamp. They hated that stamp.

Swent: Why?

Maslach: To them, it showed that the dean just wasn't paying attention or doing anything. What they expected from a dean was what they expected from all those other deans. Those other deans wrote one-or two-page memos about the person. So here Mike O'Brien was saying about a person up for promotion, "I approve." That's all he said. So I figured it out pretty quickly. I went to that office, and I started dictating. I was blessed all my life with good secretaries. I had two, Marilyn [last name] and Lynn Davidson. Lynn still, I think, is here on campus. She might have retired. Marilyn left while I was dean, but after several years. Marilyn was my inside secretary to take memos and stuff like that.

Lynn was my secretary for external affairs, kept my calendar, did all my personal correspondence, and my outside correspondence. So they were in the front office, and they were my two stalwarts. Marilyn was an outstanding secretary. She would always come in with about a half a dozen of these pencils which were all sharpened to a fine point, and she would take

dictation very rapidly and transcribe it very rapidly. Just a wonderful, wonderful person. And had a wonderful personality.

Swent: And Frances Woertendyke?

Maslach: She was senior administrative assistant. She had an office in the back, and she ran the office, but she never took dictation. So I got started. Actually, it was before July 1, but I knew that the worst thing was happening: Every one of those cases that I was going to write a memo on would go down to the chancellor's office; the budget committee would get it, and they were tired after their year of work, and they would have to find ten ad hoc committees to talk about engineering professors. Well, those ad hoc committees were already doing their research, and they were not supposed to be doing this sort of stuff during these summer months, and they would come in with a chip on their shoulder. And guess why we were only getting 35 percent of our cases approved? There were just two strikes against us because we were not following good procedures.

The calendar calls for cases for full professors to be in the chancellor's office in January, associate professors in February, assistant professors in March. And this was July. Everything was wrong. So I really went to work. I read those files, and I realized how non-uniform they were. I did my best by doing a summary memo and sending them down, signed. No stamp. I dictated about ten memos that day, and Frances was quite surprised. I said, "Frances, send the files from the committee directly to me. I'll take care of them." Because this was my number one job.

#### Learning How a College Operates

Maslach: I pursued that during that summer by going over to the College of Chemistry, which I knew had a good system, put out good cases, and asked an associate dean that I knew well how they did it. Well, he didn't know exactly because he was associate dean of student affairs, so I went and met with the dean of chemistry at that time, and I just learned from them how they operated as a college, and how they prepared memos and what the department of chemistry's responsibility was and what the dean's responsibility was.

Swent: It was the College of Chemistry?

Maslach: College of Chemistry, which is an anomaly, really. I could go on and write a book about it, but basically, Dean Lewis many years ago, knew that to have power, like Mike O'Brien--he was long before O'Brien--you have to be dean as well as department chairman, so he was dean and chairman. There was only one department of chemistry. Later they put in chemical engineering as a department, to keep us from developing chemical engineering, in many respects. It's not quite true. They started chemical engineering before we did. Mike O'Brien tried to start process engineering and take chemical engineering into engineering. It didn't work.

But old man Lewis, dean for many years there in chemistry--he knew essentially what he was doing. So the side line here: The three people who were mainly responsible for the development of this campus as a science-oriented, famous campus were Lewis from chemistry, and physics--Birge from physics.

Swent: Evans?

Maslach: No, Evans was the mathematician. Basically, Lewis came first, and he brought Evans and he brought Birge. Those three men were the men who really operated this place. They operated the Senate side.

They were all deans or chairmen, and they operated the Academic Senate side, perfectly. They knew how to develop curriculums, how to get things passed in the Senate and so on, and then of course, through--boy, I'm getting a block on names today--Robert Gordon Sproul, they got their money, and an intermediary between the deans and Sproul, who was president during those periods, was the provost, Monroe Deutsch. So for more academic problems, they went through Deutsch and developed the campus.

Anyway, I went to these people and learned. I just literally sat at their feet and just learned how a college operates, what a department does, and so on. I remember the man in chemistry reached over. He said, "Do you know this?" It was the academic personnel manual, a little black book, about two inches thick. I never saw it before [chuckles]. So I got acquainted with all of these details: how the college and how the campus operates. I never knew any of these things.

I got a lot of good tips from chemistry, and I went to the budget committee chairman. I knew him. And I just sat down and talked with him and learned how the budget committee operates: how they get ad hoc committees. I had been on ad hoc committees,

but all I remembered was a memo from the chancellor, appointing me to those. So I learned how they were appointed.

So I got moving on the academic personnel side very fast. During that first semester or so, a colleague of mine back at MIT, by the name of Goudsmit, a famous physicist, had become head of the American Physical Society, and he put out a manual on how to prepare papers for *The Physics Review* and all the other Physical Society publications, magazines. It was a very cute technique. He basically wrote all his advice in the form of a paper. Here was the title, and here was the abstract. He told what he was going to do. And then the introduction. He introduced the problem, and he went on, as though he was describing an experiment and this equipment and all this, and he made these measurements and what have you. Well, instead, what you did is you did this if you did that in order to meet the requirements of this publication and the review process and everything. And then he bound it, as he would bind one of his publications. And he sent it out.

#### Writing a Manual for Case Preparation

Maslach: I got a copy of it, and I said, "Man, this is a wonderful idea." So I copied it, and I wrote, "How to Prepare a Case for Appointment, Advancement, and Promotion." And I just did the same thing. An abstract, and then I went through the introduction, gave the whole process of how it goes through the system--departments, to the campus and so on. I did the whole thing. I thought that was very creative, it should have been listed as one of my publications because it made a major, major change.

The department chairmen who were brand new--no history of the department before--now knew what they were supposed to do in presenting a case. I had, of course, my Coordinating Advisory Committee, the same way--all chairmen, all deans--I mean, assistant deans--and all directors of organized research institutions. And so we started moving.

This I think was the major first thing that I did in the college. I realized that I actually had disorganized this report because there was one big thing that happened while John Whinnery was dean, and I was heavily involved in it. In order to prepare ourselves for a new dean and also help prepare ourselves to be organized and do all these things, John appointed four committees, who would just study curricular problems, study

graduate ed problems, research problems, space problems--things like this.

I was riding herd on them. I was sort of the super-chairman of these four committees. I remember Harmer Davis was the head of one of them, and Earl Parker was head of another. I've forgotten who the others might have been. We decided to do something a little different. I give Harmer Davis a lot of credit here because he was a very social type, very knowledgeable about how to give a party and stuff like that. We had these committees of faculty within the college, working and coming up with recommendations of what the college should do, okay?

This was the first time grassroots-type activity was done. I must say that I was in part responsible, with John Whinnery, for this because I didn't foresee being dean but I did foresee that these were some of the problems.

Swent: Did these committees correspond with the divisions or departments?

Maslach: We talked about that. No, we plucked people from everywhere. We stayed away from all of the minor divisions. We just took people for their ability to come up with ideas.

So anyway, we got these four committees going, and they were actually going during the time we were on pins and needles, waiting for an announcement of a new dean. This was something we were going to give to the new dean. Well, I think maybe that is one of the reasons I became dean, now that I think about it, because I had that previous experience of getting the grassroots stuff. That's why I was so eloquent when I spoke to Strong, because I had a background of what these four committees were doing.

### The Retreat at Granlibakken, December 1963

Maslach: We ended up--and this was my idea--we ended up that we were going to have a presentation of this material to the dean. It was now, like, December! What I did was, I organized a party. We took the entire faculty in buses, Greyhound buses, which were chartered, and we went to Granlibakken, a little resort off Lake Tahoe, up in the Sierras. We had the entire place to ourselves, okay?

Swent: What we call a retreat now.

Maslach: A retreat, our first retreat. I organized it, etc. At this point, I was dean. So anyway, it was one of the greatest ideas I had. I got rid of the buses. I sent them off to Tahoe. We were there in the snow, at the end of the road, away from Tahoe--main road, 89. Nobody had any wheels, so there was no way to go gambling or anything. We were just going to be there, and we were going to work.

Swent: This was 150 faculty members?

Maslach: Yes. And we just had fun. Each of the committees met and prepared their presentation and so on. And so the presentations were made to the entire faculty, and the recommendations were made by the committees, and the recommendations were voted on by the entire faculty.

Swent: Right there.

Maslach: Right there. We went three or four days on this, and we just had a wonderful time. Great food, lots of food. And I found that the dean had a little money, very little, and I just essentially set up a bar. I was in charge of the bar. Of course, the people there who ran the bar poured the drinks, but we had good wines and beer, and we had a happy hour.

So I ended up with thirty recommendations of what to do. These were grassroots recommendations.

Swent: I'm sorry. I'm confused. I thought these four committees had been set up by Whinnery.

Maslach: During Whinnery's tenure.

Swent: And you were--

Maslach: And they did their work, and then he left, and the committees did not report until the next semester.

Swent: I see. Okay.

Maslach: Every committee dies in the summer [chuckles], okay? So I got all these committee reports and all these things. I'm sitting right up there, and I'm chairing the whole goddamn thing. It was fun. It was real fun. Everybody spoke; everybody said what they wanted; everybody did this and that. It was a great timing. I did not have any premeditation that this would be as powerful as it was.



One thing--that's when we became a college. That meeting in Granlibakken was when we--everybody met everybody else--I was introducing people from civil engineering to people in electrical engineering. They didn't even know each other. So this was the time when we really got to know each other. It was just night after night. The last night of the retreat, I repented, or relented, I should say. I brought the buses in, and everybody went off to--I forgot where we went. One of the big casinos. South Shore? No. We had it at the north shore. They had that casino right there, something state, casino. Frank Sinatra took it over years afterwards. But we went out and had a night at the casino. People got to playing the slot machines and so on.

The next morning, we all got up, and we divided up the buses. Some people wanted to go straight home. Other people had brought up their skiing equipment, and we had a day of skiing, on the college [chuckles]. So we really had a fun week. Actually, it was about five days. I still remember it. I still remember all the time together.

It was so deep in snow, those buses barely got in there. We had to walk in for a hundred yards or so with our luggage and were assigned rooms. We took over the whole place. It was just wonderful. I wanted to give you that, but I want to get back because the thought occurred to me that my having so much knowledge about the college helped Ed Strong make up his mind on the deanship.



## VIII DEAN OF THE COLLEGE OF ENGINEERING, 1963 TO 1972

[Interview 7: February 4, 1999] ##

1963, a Critical Year in Rarefied Gas Dynamics

Swent: We had just begun your deanship last time, talking about it.

Maslach: Well, since I last saw you, I had a lot of thoughts about what happened during that period. I must say that, while I cannot describe it as being disorganized thinking, I realized that so many aspects of my career were thrust upon me and could not normally be considered part of a deanship. You have to put this in the context of history of that time. We're thirty-five years along, and we're beginning to get some perspective.

But in 1963, [President John F.] Kennedy was killed. In 1964, the Republicans held their political convention in San Francisco, which was an important element of the beginning of the Free Speech Movement on the Berkeley campus. And all kinds of other things were happening internationally in terms of my field of research; namely, upper atmosphere aerodynamics. The day of Sputnik was over but we now had the promise from Kennedy that we would put a man on the moon. Of course, since we were the largest single research group doing rarified gas dynamics, we were under stress--or at least demand.

I felt that it would be necessary for me to kind of talk about a given element of the deanship and progress to a certain point, and then it might not be quite chronologically correct, but then go back and pick up another theme and follow it to its kind of logical kind of semi-conclusion.

Swent: I wonder if I could interrupt just a second to point out that there's a conference this weekend, the California Studies conference, a big statewide conference. A big element in that is the Free Speech Movement, which is now looked back on as one of the pivotal events of California history.

Maslach: Yes. It was quite a time, I'll tell you [chuckles]. To start with, I think you ought to take first the basic changes that were carried out in engineering alone, as part of the deanship. This was extraordinarily important and, of course, is the central theme of doing this oral history. As I told you last time, I started looking at files and so on the summer before I actually took over on July 1.

#### Frances Woertendyke Eberhart and Administrative Changes

Maslach: I also had long conversations with Frances Woertendyke at that time and knew that she was looking forward to something different. She had been in the College of Engineering for a long time and in the dean's office for a long time. She was aching to move.

This actually fit in my plans because in certain respects Frances and I have different styles of administration. I tend to be the gung-ho type moving quickly and taking on responsibilities and doing quite a bit of my own work within the office. Hers was a different form, in which for years things went through her simply because Mike O'Brien had been on half-time leave all that time.

She and I evolved a plan which was that she should go to "systemwide" [the university system office] because over the years she had been heavily involved in two major systemwide activities. One is the Engineering Articulation Conferences and then the other was the Engineering Liaison Committee, that committee composed of senior officials of industry and government, who met yearly to discuss the direction of engineering statewide, not just Berkeley.

So there was a statewide function to be done in engineering, and we explored that--she, through her channels and I, through my channels. She opted to take that job which was systemwide and put her back into contact with a number of her friends who were also in systemwide, including the secretary of the regents. I used to go down there at systemwide, and at noontime I'd always see this group of four women enthusiastically playing bridge while they were eating their lunch in the cafeteria on the lowest floor of the systemwide office building [University Hall].

She was very happy to move there and take over that function.

Swent: Where was that office then?

Maslach: There was no office, really, for engineering systemwide. It was in essence created.

Swent: You were speaking about their playing bridge.

Maslach: They had a canteen.

Swent: In which building was it?

Maslach: Systemwide office building [University Hall] on Oxford and University.

Swent: Okay.

Maslach: So we kept seeing each other because as dean of engineering at Berkeley, I was, of course, on all of these different committees. She and I would take trips and so on.

Also about this time I noticed that a professor Howard Eberhart of civil engineering was often coming into the office around six o'clock, and walking out with Frances. They later were married and moved down into the Santa Barbara area. Howard continued to teach, actually, part time in Santa Barbara. Eventually died, and Frances just recently passed away.

So that change in the organization of the college dean's office forced me to look around for people that I needed because there were obvious things that needed to be done. If you looked at the primary things [that] were facing me: 1) faculty hiring and improvement; 2) aiding in curricular development, although most of that was done at the department level; 3) we were grossly under our space quota, which was a formula, which I learned about during this time, and we really needed more buildings, more space if we were to carry out our new mandate, which was to move into the graduate area, which takes more laboratory and space in general, and then finally [4)] get on top of the budget and learn about money and things of that nature.

I advertised for the budget person, to do budget and space work, and we first hired Bob Knox, who was a business administration major and very active in recruiting in the business administration field. He left us after a couple of years and was replaced by David Brown, who has stayed on right until retirement and is in fact doing recall work right now at the College of Engineering.

Rachael Stageberg, Administrative Assistant

Maslach: The second person that came in at the senior level was Mrs. Rachael Stageberg. She was picked out by Frances Eberhart, really. Frances knew the people in engineering, and she knew this woman, who was an administrative assistant in electrical engineering, working for chairman-then, Lotfi Zadeh. Of course, electrical screams, but Mrs. Stageberg came to work for us in the college.

I always recall the first time I saw her. I then had a career with her for twenty years within the university. She came in with Frances. We had a cocktail table in my office, round and low, with three nice chairs. We sat down. She was perfectly coifed, perfectly dressed, poised--just in command. There was no question about it. I don't care how dominant Frances was--she was a large woman and in charge--but Rachael was a take-charge type. You could tell it within five minutes, you know?

She sat down, and we started talking about the job and what it entailed and what I could see in the future. Of course, this was very interesting because Frances was listening to how her job was being changed, basically. We went through the whole thing. At the end, I asked her if she had any questions or any conditions of employment. She said, "Yes, I have a couple of conditions of employment." She had a great sense of humor, and the first thing she said [was] "Don't ever ask me to lift anything heavier than twenty pounds." [chuckles] She wanted to be able to leave on Thursday afternoon an hour or so early in order to have her hair done, and the last one was, "Don't anybody try to make me give up smoking." She smoked two packs of cigarettes a day--not all the way down, but about halfway through. She made it an artistic display, the way she smoked. In other words, it was something to do with her hands more than it was the smoking. We all agreed to that, so that was the end of it. The sad feature is that I should have tried to get her to give up smoking. She did about fifteen years ago. But she died actually of a combination of Sydney-B flu, pneumonia, and emphysema, which was of course a lung problem. She could not convert oxygen in the air to oxygen in the blood. But she was a sprightly person.

Frances tended to be a woman who frowned a lot. Rachael was a woman that laughed a lot, smiled a lot. So it was an entirely different office arrangement.

Swent: Rachael was your administrative assistant.

Maslach: Yes. She went on to higher titles. I did not have her the entire time during deanship and provostship in my career, but she did come back when I was in the chancellor's office. She went also to systemwide, and she worked for one of the vice presidents down there. She was involved in a lot of systemwide things.

#### David Brown, Director of Budget and Space Planning

Maslach: The humorous story about David Brown was he came over from the personnel office, where he was working, and he was doing what we call a desk audit. In other words, they look at what you do and what you don't do in your job, to see if you were qualified or if this job should be re-rated at a higher level, or even a lower level. But he came over and did a desk audit on one of our people, and he was so interesting to talk to. Amongst other things, I found out that he had served in the Coast Guard--in fact, had just gotten out within the last year or so.

When he left, I told Rachael--I said, "Remember that guy's address and phone number. He's a comer. He's someone we ought to be thinking about." She agreed. A year or two later we hired that guy, David Brown. In those days, we did not have to advertise much. If we had people in mind, we could go ahead and make offers. So that was the beginning, really, of the new organization that really took in effect more in the fall, almost December, before we had the people on board.

#### Learning from Working with Chancellor Ed Strong

Maslach: The Granlibakken thing, of course, was in the wintertime, when we went skiing on the last day. But that whole period of those four committees working together--and I was sort of the major-domo before I became dean. I was the chair of this group. We had four subcommittees, headed up by people like Harmer Davis and Earl Parker, and Bill Jewell was in charge of one--you know, people of that stature, the top people in the college.

I was getting my directions in the academic side from that area, and I was spending a lot of time learning the job. I think I already said that when I was appointed, Ed Strong gave me three things to do: namely, become number one in the United States, and to make our curriculum a true four-year curriculum (it was really

a four-and-a-half year curriculum, for a bachelor's degree), and then get people more active in the Academic Senate.

I would meet with Ed Strong every week--sometimes every other week because we'd have to cancel out--he especially. But it was a very, very wonderful way to learn about the university primarily and then secondarily what I should be doing in the College of Engineering. He was a tall, rugged-looking person. Big shock of hair and surprising--he was a professor of philosophy, which is considered quiet meditation and so on.

He actually was a very physically active person. During World War II he went to work up at the Radiation Laboratory, which many professors did, incidentally, during World War II, because there were no students on campus. Here a professor of philosophy was operating the great big crane which spanned the large shop area. He was the man up there in that little cubicle on the crane, and he would be dropping the hooks, whatever, to pick up things and move them. It was a little odd [chuckles], a professor of philosophy as a crane operator. But both sides of him worked very well.

He was also very handy with his hands, and was sort of a carpenter and cabinet maker. When I would go--Doris and I--would go to his home, it was so wonderful to walk in and look at the fabulous all-paneled living room-dining room area with absolutely perfect cabinetry, which he--he had done all of it. During World War II, incidentally, they had had the lot, and then they designed the building, during the time--he just did it himself. He was such a pleasure to work with and to talk with.

You have to remember that there was a very close relationship of Clark Kerr and Ed Strong on the Berkeley campus. I would put Clark as sort of the big-picture man, and Ed Strong was very active in the Academic Senate and was the one that carried out a lot of the Academic Senate regulations to support things. Remember, amongst all of the things that were going to go on in '63 and a few years thereafter, we had the expansion of the university from essentially a one- or two-campus system into a nine-campus system. This was turmoil right under our feet.

Meeting with Ed was always a pleasure--going down to his office and talk over various problems.

Swent: He was chancellor from 1961 to '65.

Maslach: Yes.

Swent: A couple of years.



Maslach: There was a period with Martin Meyerson. And then after that was Roger Heyns.

Swent: In '65.

Maslach: What do you have Heyns down for?

Swent: Sixty-five to '71.

Maslach: Well, actually, Martin Meyerson was in there.

Swent: January to July of '65.

Maslach: Yes. Okay.

Swent: So you had a couple of years with Chancellor Strong.

Maslach: Yes. But I had known him, of course, from the Faculty Club. He was occasionally a hearts player, but most of the time he played cribbage or bridge. I would see him and talk with him casually.

#### The Hearts Table at the Faculty Club

Swent: This was a categorization? You were a hearts player or a cribbage player or a bridge player.

Maslach: That's right. The hearts players rarely, if ever, played bridge; and the bridge players occasionally, but without enthusiasm, might play hearts [chuckles]. Some of each would play cribbage. Dominoes also was a big game.

Swent: This was at the Faculty Club.

Maslach: At the Faculty Club. It was rather interesting. I'll tell one little story. Art Hutson, who was secretary of the Academic Senate and an avid hearts player, professor of English, one time just glanced around and noticed--he said, "Gentlemen, we have here a quorum of the executive committee of the Academic Senate." He said, "As secretary, I would like to put before you a motion." [chuckles] And so a piece of business was accomplished while we were all playing cards. Everyone said, Aye or No, and then the motion was passed, and Arthur adjourned the meeting, and we went on playing cards [chuckles]. I always thought that was rather humorous.

Swent: Yes.

### Recruitment and Advancement of Faculty

Maslach: The first thing, of course, that I noticed was the big problem that I always keep coming back to, which is of course for me the number one problem of the College of Engineering, and that is the recruitment and advancement of top faculty. I will now disclose the mystery of the twenty-three positions which I found that were still in the College of Engineering and were not being used. To do this, I have to get into a little gobbledygook--namely, the jargon of the budget--and talk in terms of FTE and FTE students and FTE faculty. FTE mean full-time equivalent. This is essentially a mechanism to account for the fact that a few students are not full-time. Most of them are full-time, but a few are taking less than full curriculum and not graduating in a straight four years.

What you do is go through this lengthy arithmetic of number of units in a course and how many students are in that course, and then you start adding all this up. From this you end up with a number of full-time equivalent students in the College of Engineering, and that leads to another formula, which then goes into the full-time equivalent faculty that you deserve.

Now, about 1960--just to make it a rough position--the University of California was being pushed into a less than desirable condition in the budget. Up to about 1960, I kind of put it like the retirement of Robert Gordon Sproul. It was a new kind of university budget operation and budget relationship with the legislature. The single best example is that you can look at buildings on this campus which were designed and built when the space formula was liberal and, now, buildings in which the space formula is anything but liberal. You see buildings in which offices are small cubicles, and the office, say, of chemistry, would be a good example. A couple of their buildings were built under the old formula, and now a couple are under the new formula.

Or go to the Hearst Mining Building and see those beautiful paneled offices with the fireplaces and so on, right next to a lecture hall where you're going to teach. Or the other direction, your laboratory where you're going to do your research. Well, we don't have that today. This was the beginning of the slide in this regard.

At one point--just to give just a general perspective--the number of students that you were talking about per faculty member was, say, fifteen--to use a rough number. Well, it got up to sixteen, eighteen, twenty, and whereas state colleges were at the twenty level and community colleges more at the twenty-five

level, why, we were just being pushed slowly down that area by the cutting back of the budget.

The first thing you did was count how many FTE faculty we had. How many FTE students do we have? You start going through these calculations. If you really want to increase the number of faculty--and we desperately wanted to at that time--we're going into a new function. We needed graduate faculty. Today, for example, you will notice on the campus we have graduate and undergraduate faculty. We needed students, and we were not getting them as rapidly as we thought we would at the graduate level, recruiting from the entire nation. But it obviously was the fact that we needed more students at the undergraduate level in order to support the college that we were talking about.

Swent: This explosion of students, then, was at the undergraduate level, still, in the sixties?

Maslach: No. In fact, as I will point out, in engineering, when I became dean and for a few years thereafter, we did not have the students. I had to go out and recruit students within the state in order to build up the college size and to get the FTE. And our graduate enrollment slowly increased as we got new faculty, who would then attract graduate students, because it's really a circular argument in this whole operation. You also needed space in order to attract faculty. It's a chicken-and-egg proposition, and you have to make progress on every front at the same time.

So anyway, I remember going through this, and I could see we deserved a few more faculty, but I petitioned for this in my first budget message, and I got them. Ed Strong was extraordinarily useful, helpful in this regard, and very sympathetic in this regard.

Swent: This petition, then, went directly to the chancellor?

Maslach: Well, everything goes to the chancellor's office. Within the office, he has a budget office. The key man in that regard was Errol Mauchlan. He's still around--retired, of course. The key man that I worked with was Frank Ketcham, and his staff. Oh, there were Nancy Park and Anne Wright.

I started learning first from Frank what all these numbers meant, what the formulas were. I'll just toss out some numbers, and anybody that remembers these old formulas will laugh, but thirty, twelve, and eight; and fifteen, fifteen, and four. These were numbers that were in the formulas for allocation of faculty and also in terms of the allocation of space. What they said to a knowledgeable person was that a faculty member who is guiding

graduate students and having graduate seminars, the number of students in the seminar was, say, four, whereas upper division would be twelve and lower division, thirty. That's simplifying everything, but in general you get the idea.

And then space was on top of that. So if you had graduate people, you would get more space. Undergraduate people, you don't get more space. You get office space and, of course, you have the classrooms, which are part of the campus. We do not control the classrooms that much within the college.

So I had to learn all this thing. I was doing twelve- and sixteen-hour days, and I am not exaggerating. You cannot believe the pressures that were on at that time because all these other things were happening--FSM and so on. But to complete the concept, we were able to change the college office to have a top man on budget and space analysis, space development. And then we had a top person, Rachael, in terms of personnel. Her base job was non-academic personnel; in other words, the College of Engineering has a lot of non-academic people, staff. We were blessed, of course, with a very good environment. People loved to work in Engineering because it was a straightforward job, and there were no big egos. People stayed on.

Our problem was that most of our people were at the upper levels, bouncing against the ceilings of their particular job classification. So that's how I got into this with Rachael, doing all of the groundwork, of course, and we were able to change the jobs. The jobs were different. No one had done any of this in the previous twenty years. So I was really a very popular person with the staff. Still am. Many, many staff will come up and talk to me all the time, even now.

#### "Finding" Twenty-Three New Faculty Positions

Maslach: This is the way the college was moving. The twenty-three positions were in the college budget--I found them there one day, and I asked Frances. I said, "What is this?" She said they're positions for lecturers. Now, a lecturing position is a full-time equivalent position, and a full-time equivalent position can be used for lecturers or for ladder-rank faculty. Well, I found that out for the first time. I had been a lecturer, and I had been a full-time faculty with a professor title.

I said, "Why aren't we using these positions?" Well, things had changed, and we used to use more of them with part-time

lecturers that would be in for quarter-time, half-time, stuff like that. A lecturer just teaches; doesn't do anything else, but just a teaching function. I didn't realize that I had found a gold mine. Here were twenty-three positions. We had working about 153, to give you a rough number. How could I use those? So then, of course, I talked to Frank Ketcham, and then I talked to Ed Strong, and then I talked to other people. I started distributing those positions, to be used as regular ladder-rank positions.

The ladder goes from assistant professor, so many steps; associate professor, so many steps. We have a true ladder system in the University of California, as opposed to a phony ladder system at, say, Harvard, where they really appoint only at tenure level. They use the assistant professorship like an elevated graduate student or post-doc[toral student], something like that. So I started being Santa Claus, giving out positions, even before the budget period had come. You don't get the results of the budget period until months later. So that's where the twenty-three positions were. Hidden. Not being used.

#### Recruiting Engineering Students at the Community Colleges

Maslach: Of course, that immediately gave me a problem. If I put out too many of those positions, I cannot truly justify them in terms of FTE student activity. So early on I realized that I had to do something about recruiting students. I didn't know quite how to do this. I started thinking about it in terms of recruitment at the freshman level. That was just such an enormous process, and I just didn't know how to do it.

Engineering was not popular. This campus, and engineering in particular, got as many applications as were justified by the budget, and no more, in the sixties and the seventies.

Swent: This must have been a change, then. Where did I see this figure that when Mike O'Brien was dean, they anticipated something like 2,400 students, and they got thousands more?

Maslach: The big burst was immediately after the war, when the returning GIs--actually, in the forties.

Swent: So they had actually caught up, then, with that.

Maslach: There was an infamous report put out by the Bureau of Labor Statistics in about the--

##

Swent: All right. You were just saying that there was an infamous report that was put out.

Maslach: By the Bureau of Labor Statistics of the U.S. government, in which they concluded that there would not be a big demand for engineers in the next ten years, simply because of the fact that there had been so many people who had come out of the military who had partial engineering backgrounds--the Sea Bees, for example, was noted as an example of people who could get things done, using baling wire. That report put a horrible damper on engineering enrollments through the fifties and sixties.

The second thing you should note is that it was not until [Albert] Bowker was chancellor--and I'm talking in the mid-seventies--that we really had this enormous pressure put upon us by enrollment pressures at the freshman level. Bowker came, and he did an analysis. Of course, he's a top statistician. He just pointed out to us in the seventies that up to that point we had just almost fortuitously had enough applications of enough qualified people that when they did actually come, it was essentially holding us at our level.

It's amazing to me. Today we get thousands of qualified applicants for engineering freshman positions. I'm talking thousands truly, on the order of four thousand. All of them have 4.0 grade point average in high school, and we can only take so many hundred. It's just amazing, because in my day we were looking for freshman students.

What I did was I came to the conclusion that the way to go after new students was at the junior level. The University of California, with its articulation agreement with the state colleges and junior colleges, gave me the opportunity here. The first year, I went and visited five or so community colleges. Basically, I was giving a pitch to the faculty, the advisors--and some of these colleges have separate staff of advisors, who are not teaching faculty--and then, of course, administrators.

I was just pointing out that I had learned--from my looking at all kinds of things in those first six months, a year--that half of our graduating seniors were from community colleges. This was kind of a little-known fact.

Swent: That's a lot.

Maslach: That is a lot. In fact, that is a secret, really, of what is happening budget-wise. In other words, we had very few lower-

division courses and a lot of upper-division courses, and we had these students coming in at the junior level. So we had a ripe opportunity budgetarily to not have these big classes in the lower division but to have a concentration at the upper division.

Swent: Did people transfer from the state colleges?

Maslach: No, they don't--still don't, and did not then. The reason is that the state college curriculum is so different in the final two years that the transfer is very difficult, to get a degree. Say you finished at junior level at a state college [and] transfer to the senior level. A logical concept. It just doesn't work out. The numbers are just down in the ones to tens, whereas at the community college level, we had a rich opportunity.

It was extremely difficult to kind of make the break into the community college system. I had gone to all these articulation committees and had been prominent--in fact, I had chaired the committee for one year later on. Whinnery had been very active with the articulation conference. He and a professor at San Jose were responsible in large part for the details of the common lower division and the first electrical engineering course that was in that first common lower division. Whinnery wrote a book, *Fields, Waves and Circuits*, and then the man at San Jose also wrote a book. His name was Smith, as I recall.

These were two competing textbooks. They were similar and yet quite different. They're still, as far as I know, in use today. These were two very fine texts put out by two people at the same time. But in certain ways, the two texts--when you look at them, John's is far more global and theoretical and looking forward, whereas the other was more of the technique of the how to do things, rather than the why. Of course, San Jose, Silicon Valley, and so on, there was an opportunity for them to have a text of that nature.

So anyway, I went to the various community colleges. I spoke, and I spoke with all the students. The first year, I was learning. I think it's honest for me to say that the net result of five trips to community colleges resulted in maybe one or two more students coming from the community college [chuckles] the next year. But then, by learning something, I suddenly realized what was wrong. What was wrong was not the faculty or the administration, not the students, but it was the advisors.

If you put yourself in the place of an advisor in a community college and you have a student that's quite good, maybe not the finest, you want to advise that student and in all good

conscience--I'm not criticizing here at all--you would maybe opt for the state college for that student. The university--well, their standards are higher, and everybody knows if your grade point average drops immediately upon going into the University of California, and this student is really not up to this and so on and so on--so, okay, you advise the student to go to the state college, upon completing an A.A. degree.

The problem, therefore, was to make contact with the advisors and the students, sort of together. I tried all kinds of different techniques. For example, in the beginning I would just go to the place and talk with the advisors [chuckles], and then I would talk with students and their advisors. The best example of success was Diablo Valley [College], right across the hills here. That was always a good feeder school for us, good students, fair number--not as large as the number that we get from San Francisco, but pretty good.

And so I would go over there, and I would say, "Look, I'm here. I'd be happy to sit down and look at files of students and give you my opinion." When that offer was made, it was amazing how many advisors took me up on it, right away. The one time I remember I was over there, and I was over there starting about two or three in the afternoon. I was kicked out with the advisor and some students [chuckles] at ten o'clock at night. I didn't have dinner, and I was looking at transcripts the entire time. Students were lined up outside the hallway as far as you could see [laughs], sitting on the floor, waiting. I was judging each one. And that was a turning point because I was able to convince the advisors that they had a good product.

Suddenly, I got a brilliant idea--and this was my best change in this whole recruiting scheme. It was about '65. I noticed from the kinds of questions I was getting from students and advisors that they could be best answered by my students, here at Berkeley. So I went to Vi Lane in the undergraduate office. I said, "Vi, I need a list of names of students," and I told her what I was doing. I said, "My next three community colleges are X, Y and Z. Give me the names of good students who have done well, a student who could get up and say, 'Look, I've got a better than three point average. I came from this community college, and I know half of you people out there in the audience, and you can do just as well as I did.'"

That's what I did. I would go to these community colleges with a student. I would always make a deal out of it. We would have lunch on the way, and we'd meet the president of the community college [chuckles]. He'd meet some of his old faculty members. And then we would go out in the auditorium. I would do



the introduction and give the broad picture of the university and what we were doing and why we were interested in coming here, because we got good students in here, and we're kind of surprised we're not getting more.

"I want to introduce somebody in the flesh here, somebody you all know, or should know. He graduated here and here's what he's doing. He's enrolled in this and doing this, doing that. He can tell you his grade point average.' That's privileged information, you know. So we got the students in; I didn't answer a single question from then on. Every question during that visit was directed to the student. And they were really good questions. Questions they wouldn't ask me, they'd ask the student.

We'd get together with a bunch of kids, all talking. It worked like a charm. Well, I was extraordinarily successful in this. Today, of course, there are over a hundred community colleges. Not all of them have engineering lower division, but a lot of them do.

Swent: Didn't you also influence the curriculum at the community colleges?

Maslach: Well, that's the common lower division I keep referring to, which was the function of the articulation committee, which was to make it easy to transfer.

Swent: Make it possible.

Maslach: Yes, make it possible.

Swent: But I have a note here that says that you--

Maslach: I did more, yes.

Swent: --worked hard to get what? an E-54? at the time?

Maslach: Well, I did a couple of things, and I'll bring it up. It flows out of this, the community college thing.

Swent: All right.

Maslach: The concept of taking a student along just worked famously. And then, at the same time, I found out, working with Vi Lane, that we had records of every undergraduate student who graduated--who came in, what happened to them, and when they graduated (if they did), and what they did thereafter. So we had a continuous record of all these people.

An Important Report on Articulation of Community Colleges

Maslach: I spent weekends and nights down there [chuckles]. Vi Lane would only entrust so many files to me at a time. But I started elaborating on all this work, and I had lots of numbers. I wrote a report, which showed that in Engineering Berkeley, counting every student that we ever had from a given date, how many were home-grown freshmen, four-year people at Berkeley, and how many came in at different levels. A few came in at the sophomore level. Most came in at the junior level. Very few came in at the end of the junior year. And then what happened to those students.

As I said, 50 percent of the graduating student body eventually were going on for graduate work. Not at the beginning, when I first started, but eventually this was true. And of that 50 percent, 50 percent were from community colleges. You could not tell a grade-point difference between a community college transfer and a UC four-year student if--and this is the big if--that student from the community college was qualified to come in as a freshman--for example, academically qualified. By that I mean people who could have gone to the university but opted for the community college, usually to save money, but under that proviso, that was the way it went.

Now, people who had curricula deficiencies which they went to the community college to make up--they did not have math or enough math, or they didn't have this or that in high school--those students did not do as well. So I was pointing this out to the advisors. "Look, here's a record of how well your students do--so you can calibrate in terms of your students." That is, of course, the message I gave.

That report received very, very wide circulation, not only within the state of California but across the nation because the community college concept was primarily in California, Michigan, in Texas, later Florida. But then it became increased enormously because it was a way to get a higher education for the first two years for a large number of people, without great costs.

Swent: Excuse me. Did this report have a name?

Maslach: Oh, I'm sure it had a title. I could find a copy, maybe someday.

Swent: When was it?

Maslach: Oh, it was about '66, after two or three years in the deanship.

Swent: You said it circulated widely.

Maslach: Oh, it made me an expert on the community college system. What really it made me an expert on--and I still give talks on this internationally--is the California system, which is the three-point system of the university, the state colleges, and the community college. The concept is articulation as the key word, the transfer function. I have given numerous seminars. Went to Saudi Arabia numerous times to influence this upon their thinking. It's only recently that they have started community colleges, but I first went there in '73. I met Crown Prince Fahd and others. He still remembers today that I talked about community colleges.

They use them a little differently than we do, but the concept of articulation is still exactly the same as we do. So I'm a great proponent of the California system. I tried to influence France in this regard because I was a consultant for France for a while. They're so entrenched in their system, nothing will ever blast them out of that, never. But Germany has adopted parts of the system. The California system is looked upon with great favor.

One time late in my deanship, I had a delegation of New York legislators come and visit me because of this articulation concept, which they had gotten wind of. You have to remember, New York state didn't build universities, even, until after the war. So they built community colleges. They found out this was the secret, and they did it.

My legacy with community colleges goes on and on [chuckles]. I am today, I think, still the only University of California person who received the community college award, which they give yearly to the outstanding graduate, former graduate. It was at an articulation conference in Sacramento. A thousand people there. But I got this award. Of course, the introduction was on all--this report, and how I proved community college students could make it so well.

Swent: Did you do any similar analysis on graduate work?

Maslach: Oh, yes, and I will get to that a little later, at a further stage. We in engineering know exactly what happened to every graduate student, from the day they arrived to the day they left --when they got a degree, what they did, where they went, and so on. We have just the same background--of course, you cannot use a lot of this data too easily because you cannot identify people. You can only talk in gross numbers and percentages. It's only those kids that I took with me to the community colleges that

were known. They voluntarily agreed to do this. So that worked out quite well.

Whereas in the first year I said maybe one or two students came, more came from the community colleges, and the second year I think about ten more, and then the third year, about twenty more, and on cumulatively--so that we really built up an upper division very quickly, even while our lower division was not moving that quickly because of the national feeling about engineering, not a good career choice, because we had more engineers than we knew what to do with, which was of course a big lie because the returning GIs--all those Sea Bees and so on--what they did is they went to work doing construction. That was a horrible report from the Bureau of Labor Statistics department. Very bad.

I remember fighting that report for years and years and years. Everybody would bring it up and throw it in my face when I was up at the legislature. I'd be presenting budgetary requests. The campus systemwide started using me because I was articulate enough to be able to present the material. I was sort of looked upon as a senior dean because Berkeley campus was the senior campus.

#### Co-Dean with Roy Bainer of the College of Engineering at Davis

Maslach: Continuing along this line of the academic office, I was a few months into the deanship--maybe six months--I realized that I was also dean of the College of Engineering at Davis. I never heard of this. No one ever told me. I only learned about this in a roundabout way, in the strangest way. I started tracking this whole thing down. Roy Bainer was the dean up there, in residence. He explained it all to me. In the beginning of engineering at Davis, many of the courses were taught by engineering faculty from Berkeley. They would go up early in the morning--it's about a one-hour portal-to-portal drive--and give their courses and stick around and do whatever necessary, and come back.

So we were part-time Davis and part-time Berkeley. It was a significant number. I'm not talking one or two. I'm talking twenty or more faculty were doing this. Davis, of course, was recruiting people and building. But in the beginning, the core faculty was largely Berkeley. Roy Bainer claimed--and I agree with him--that this was the main reason Davis was able to start

so quickly and achieve such quality so fast. I just did not know that I was dean [chuckles].

So in the first year, why, Roy, of course, came up with the idea it was about time for us to give birth to Davis and cut the umbilical cord. There was a great ceremony. Many people came down, and we all signed the formula for disengaging and all this and that, systemwide. Roy Bainer was the new dean, without any other dean. I was a co-dean, really. Anyway, this was one of the little minor things.

Roy was an extraordinary person. Agricultural engineering. One of the people you just never expected to be heavily involved in the Washington scene, but he was. I remember he was the man chosen by the State Department to go to Cuba and maneuver with Fidel Castro. He was head of that committee to give--one of the things they were supposed to have is the ability to give tractors and farm equipment to Cuba, to change and help them.

He tells the story of his meeting with Castro, in which he sat for, like, three hours while Castro just beat him over the head, beat the United States over the head. And so at the end, Bainer had, like, one sentence. "Does this mean no?" And the interpreter nodded no, so Bainer just got up and walked out [chuckles] and went home. But nothing ever happened. He's a wonderful person, just wonderful.

The Davis campus is one that I truly enjoy. I think it's one of the great products of our expansion of campuses. One of the features, I think--self-serving, I know--but I think this concept of having a parent campus help a new campus in this way worked very, very well--really did work very well. I've got lots of examples that I could show of how well it worked. Even today we still have a liaison with Davis, closer than we do with Santa Cruz or any other campus.

I started to branch out from the community college concepts and recruitment, to this expansion here in the university. It did not affect engineering too much in the beginning. There were already colleges of engineering--in Los Angeles, and one had just started in Santa Barbara. Davis was well established. And then there were hopes to start engineering at other schools--Riverside, for example, Irvine. Well, when they proposed it at Riverside, I just felt this was a big mistake, and I said so. I don't know if I did it, but certainly other people agreed with me, and Riverside--after hiring a couple of people--dropped the whole idea.

Santa Cruz never even considered anything like engineering. They were just a liberal arts college set in the Adirondacks, New England [chuckles]. It was a dream child of the chancellor and Clark Kerr, when they were both students in college, of what an ideal campus would look like. I think they came from Bryn Mawr. They followed much of an Eastern school concept--heavy on the humanities.

The increase in enrollment of engineering took place slowly, but the main thing I want to do is put an exclamation point on my recruitment techniques. Even though we had half a dozen campuses at the university and about a dozen colleges within the state college system, and half a dozen private colleges--Stanford, USC and so on, especially USC--more than one-third of all transfer students out of these community colleges came to Berkeley, only Berkeley.

Years later, like '66, '67, why, the other campuses started to wake up. Their enrollments were down, and they did not have the size, so they started the same thing that I did--getting faculty to go out to community colleges, but they didn't know about my secret of working with the advisors or bringing along a student. This kind of recruitment is no longer carried out because we were flooded with students, just flooded.

#### Changes in Curriculum to Accommodate Transfer Students

Maslach: You mentioned that in my community college activity I worked on this transfer process from the curriculum standpoint--namely, that a student in a community college, say, down here in Oakland cannot get certain math courses and therefore is not eligible to transfer under the old common lower division. What I did was to petition in our change of curriculum that we would have an open spot, an open course in the junior year for students to make up a deficiency because the course was not available at the community college level.

Later I expanded that with Rod Park, who was the dean of L & S. We changed it so that we had students eligible to come from the community colleges, enroll in extension, and to take class work on the Berkeley campus. This was, of course, unheard of. Just think of this: we would have dozens of students in the northern California area coming to the Berkeley campus for one course. They were essentially getting their toes into the Berkeley environment by taking that one course, which was not available at their community college.

Of course, I got great kudos for this concept because it helped the community college. If a math course would have no more than eight or ten students, the community college was loath to give that course when a competing course in the social sciences would have a hundred students. Just think of the FTE concept. It's just worth a lot more.

These are the things that basically helped us with community college transfers.

Swent: I particularly wanted to ask about this one course that somebody I talked to--I've talked to several people--said that you rode herd on for about ten years. Was it fluid mechanics? Here we are, E45. This is Cline Garland that I spoke to, and he said that you and he went to a conference in Fresno, and you stayed up very late, after the resolution, recommending courses. E45 was one, and material processing laboratory was too expensive for most of the junior colleges, and you arranged this kind of extension--

Maslach: Right.

Swent: --and had to ride herd on it for about ten years.

Maslach: Yes, that was true [laughs]. Actually, what he was talking about was the introduction of this concept of common lower division with the flexibility of one course that we could give, because the materials course--metallurgy and the laboratories--was an expensive course for a community college. It's rather odd to bring that up at this point because that was especially true at small community colleges out in the sticks, out in the podunk area. I really mean this. You go to a community college, and it's a beautiful community college, but it's in an area where there's very little population. You go to Shasta or you go to others. It's a long drive. You look, but then you realize the great, great problems they have because, while a community college is central to the town and 50 percent of their curricula work is done at night, with adult students, to take this little piece of engineering and demand that there be a laboratory, is being a little presumptuous, for the university to take that position.

So I never took that position. I was always on the side of the community colleges. But every once in a while, you'd go to a community college like Foothill, down here on the [San Francisco] Peninsula--wealthy district. They have a materials laboratory that's far better than the one we have here at Berkeley. The most modern equipment, all kinds of space, everything--it's just

beautiful, absolutely beautiful. I'd go down there and drool, just looking at that space and all that equipment [chuckles].

So the community colleges differ really quite a bit.

##

Swent: You were just going to give me an example.

Maslach: Well, for example, I got into this business, and I was always surprised by things I learned. For example, San Antonio. Mt. SAC [Mt. San Antonio College]. I knew it as a place where the track meet, the Mt. SAC relays--this was a big thing in track, just like the Modesto relays in track. It was held at this community college. Then I found out from our records at the undergraduate office that Mt. SAC sent us some of our best students, really. Where is Mt. SAC? Way up in the boondocks, of course. I made it a point that I just had to go and visit that place. I was just amazed at the total discipline that was there --the faculty, the quality, the emphasis on the best. They really came through in so many ways. I'm not denigrating other community colleges, but this place was kind of special--and still is today.

I find it rather interesting to see that the governor is talking about performance criteria of high schools. Well, I remember when *California Notes*, a magazine that went out freely to all the colleges and high schools, etc., around the state of California would have always on the front page a little box that would list the top twenty high schools in the state of California in terms of the student performance here at Berkeley, and also the top twenty community colleges--or ten colleges, or something like that.

Number one in the high schools I always remember, outside of Los Angeles, where the Rose Bowl is--

Swent: Pasadena?

Maslach: Pasadena High School every year was number one. So I went to Pasadena and talked to the students about coming to Berkeley. I know this is going to sound exaggerated, but it's the honest-to-God truth because I can count the days: I went in my last years I was dean--I was going to sixty community colleges every year, maybe ten or twenty high schools. So recruiting was a major thing, especially that period '66, '67, '68. Of course, I left in the seventies, but I really, really gave it all my energy.



And the reason I did it, of course, was I went to get FTE faculty, to get space. With Dave Brown working on the space and the support budget, you know, I was able to push it. Now, a hundred and fifty faculty were active when I took over the college actually on board, teaching courses--full-time, ladder-rank faculty, not lecturers. And then I just kept picking away at this, and I talked Ed Strong into a major input of new faculty, to build up our Department of Industrial Engineering and bring in the whole new concepts of operations research, which was the big thing that was moving in that area.

Of course, I was able to petition for faculty for electrical engineering, which was growing rapidly, and the newly-developed area, computer science. When I left the deanship--and I'm counting my last budget, which was inherited by Ernie Kuh, and you count the number of faculty, it was 203. One of my conditions for going on as provost was that Al Bowker would agree to my [chuckles] budget the last year I was dean, which included a number of faculty [chuckles]. I know I had opposition from Errol Mauchlan and others, but Al did it.

Swent: There was at some point a bit of a flap over the computer studies.

Maslach: Oh, yes, it changed, but that is a two-part statement, and I'm going to have to reserve part of it because part of it was when I was provost. That was kind of maybe the more dynamic.

But just to show how things happen and the sense of curricula, people would constantly come up with ideas of expanding certain areas, amalgamating areas, cutting down on certain areas, and so on. For example, I am known as the man who did away with the College of Mines [chuckles]. Sorry about that! But at one point, in analyzing the budget, we had something like eight faculty and a total of four students. Something had to be done. I worked with the people, and it was all done, all in full agreement. Everybody knew what was happening. We finally did away with the College of Mines, actually.

Don McLaughlin had a few choice words for me, and other people did as well, but we simply had to do it because it was a luxury we could not afford. There were a number of sadnesses there, too, as well. One man committed suicide, I remember--not because we did away with Mining but he had a variety of other reasons. But I always felt that suicide on my shoulders. I really did.

Computer Science, a New Engineering Activity, Contested by L&S

Maslach: But on the brighter side was the starting of new activities. Of course, computer science is the biggest one. It was pushed by Lotfi Zadeh, who is best known, of course, today for the fact that he developed the theory and practice of fuzzy sets. It's a mathematical term, and he has achieved great awards from Japan and other nations throughout the world on his work. He was just as brilliant as an administrator with ideas, in electrical engineering.

He saw more clearly the changing of electrical engineering and the rise of computer sciences and the need for electrical engineering to be dominant in this field. You could take a look at computer science and say, well, a lot of it is mathematics, and so on, but basically the physical activities, hardware, which was dominant in those days, was all electrical engineering. The architecture of the computer--we had courses in this, computer architecture--and software development, as it came along later. Hardware first; software later.

It was dominated by people in engineering, especially electrical engineering, but also industrial engineering and other areas. Some of our top people teaching courses came out of mechanical, electrical, civil, and so on. The use of computers was overwhelmingly engineering and the physical sciences. So Lotfi--we were in constant contact because I continued the dean's coordinating advisory council, and I was working on all these things that I got out of the Granlibakken agreements and so on. I was having more such retreats as I became dean.

Lotfi just was pushing for computer sciences, so he was slowly taking and using his FTE to move that development within electrical engineering. The thing that happened while I was dean was that I received a message from the dean of L & S, who was Bill Fretter, who was a close friend of mine. He said, "George, I'd like to have you come over, maybe with Lotfi, and let's talk about computer sciences." Uh-oh. So I alerted Lotfi. This is big brother, The College of L & S. It is larger than us by about three to one as far as students--maybe four to one. They were the dominant college, of course, of the campus.

So Lotfi and I convened and figured out all of the possibilities and strategies. So we went over there. The meeting was essentially just a formal greeting and then telling us what the College of Letters and Science was going to do; namely, they were going to start a department of computer

sciences, which they did. It alerted us that we should be moving more rapidly over in engineering.

I remember Lotfi and I walking away and saying, "What do we do now?" It was a problem for a number of years. In fact, the problem went on beyond my deanship because it was very confusing for top people in the field outside to understand what the hell was going on in computer sciences in Berkeley. We have a department over in L & S, staffed mainly by mathematicians and a few industrial engineer types; but over here you had a much larger operation, with lots of computer sciences people in electrical engineering.

Actually, the L & S decision caused a disagreement between us in a certain sense but, more importantly, caused confusion to the outside world. We suffered in our recruiting of faculty during that period, and the engineering computer science program, which was just a-borning, was hurt by that.

I'm jumping ahead, but when I became provost, one of the things I was able to do was to convince the chancellor's office that the basic curricula in computer sciences should reside with electrical engineering and, most importantly, the introductory courses at the lower division were to be taught by engineering faculty. That occurred around 1973, so that was in the distance.

But in between we had suffered with this whole operation. But we went ahead and increased, as I said, the size of faculty. Today, of course, you must realize that electrical engineering and computer sciences together is the dominant department within the college. Whinnery, Kuh, were deans--and instead of a rotation of the deans--like one from electrical engineering, followed by one from mechanical, followed by one from civil, followed by one--that has kind of fallen apart. The last two deans have both been from electrical engineering.

#### Reorganization of Other Engineering Curricula

Maslach: Other activities were going on, of course. Mechanical engineering, my department, made the final step to bring all these divisions into a single department and work their curricula into a logical fashion. The other departments--civil engineering was under the leadership of Harmer Davis and Harry Seed, Harry Bolton Seed, one of the great, great men in the field of soil mechanics, internationally; was probably *the* number one man for many years. They were moving that whole curriculum forward.

The smaller departments--nuclear engineering was moving at a sedate pace and attracted many top faculty. Industrial engineering, with the addition of operations research, expanded nicely. And then the smaller departments--materials science and mineral engineering, naval architecture, which is truly tiny--and incidentally, just recently was demolished; it no longer exists, starting this last year. But these smaller groups--let's make sure I got them all in there--one, two, three, four, five--yes, got them all in there.

But the smallest one was Packy Schade, who was a dominant figure in naval architecture in the United States during World War II, and following, and other faculty. But they really had only two and a half faculty. One of them was John Weyhausen, who was an applied mathematician. I remember looking over his vitae, and I said, "Gee, they really deserve another half FTE. Make that man a whole. He's really doing full-time work." He's a great man in his field, to start with. I remember how joyous they were when I gave him a half FTE, and they had [chuckles] a full three faculty members in their department.

There were only three schools or departments of naval architecture in the United States: Berkeley, MIT, and then the private Parsons School in New York. I think I got that right.

Swent: There's a Parsons School of Design.

Maslach: Yes, that's it. So anyway--

Swent: You were doing a good deal of work with MIT, too.

Maslach: That comes under my next stage here.

Swent: All right.

#### Serving on the MIT Review Committee

Maslach: Now I want to embark on how I inherited so many things that I never knew was going to happen. It's hard to believe all the things that occurred, just because I was dean at Berkeley--because of Berkeley, not me--Berkeley, College of Engineering. Why, I was asked to do things on a national level. MIT, which I knew well and I knew the director of the Institute of Engineering Research there very well--

Swent: Who was that? What was his name?

Maslach: Oh, I can't remember that. That goes way back. He's not only retired but long since died. He was my senior by ten or fifteen years. But then I got to MIT before I was dean--because of a problem in 1958, early sixties--but I was asked by MIT to serve on one of their review committees. MIT is a corporation, and the corporation appoints one-third of the review committee, the faculty appoints one-third of the review committee, and then the, quote, "administration" appoints one-third--so it's sort of the regents and the chancellor and the faculty appointing this review committee.

Technical Advisor for the Department of Commerce

Maslach: So I started getting on review committees. The same thing happened in Washington, D.C. Herb Holloman, who was the assistant secretary of commerce--he knew people here, and he knew me casually, and he immediately wanted me on the technical advisory board for the Department of Commerce. Well, that kind of started--I had been going to Washington, of course, as director of the Office of Research Services, to build up our research program, and in the space field I had gone to many, many conferences because, let's face it, space had exploded on the world in 1958, and when Kennedy promised a man on the moon, why, it was big time.

And since we were the largest group doing upper atmosphere aerodynamic research, we were in big demand. Washington wanted us to build an enormous wind tunnel out at the field station, and we pointed out it really wasn't worth it because the kinds of problems you could solve in a wind tunnel were small and could be handled by theory. So we saved the government probably a billion dollars right there [chuckles]. It was big. But their ideas were just enormous. They did not know the scale of what they were talking about. I mean, you're working in high vacuum systems such as we had, and it was the sort of thing that should have been done down at NASA.

Swent: Moffett?

Maslach: Yes, Moffett Field. And we had a group down at Moffett Field with a small tunnel, and we worked closely with them. So I knew the national scene in a technical sense. Now I was getting into it in an academic sense, and I was getting into it in an advisory sense, which I had never, never expected, which was totally new to me.

Twenty Years of Committee and Advisory Service to the Navy

Maslach: I don't want to belabor the point, but somewhere in there I was asked to be on the academic advisory board of the Naval Academy in Annapolis. I was there for five years as a member of the board. Very prestigious board, with lots of top people from major industrial and banking organizations. I was sort of out of my element there for a while, just looking around at the people there. But the second five years, I was the chairman of the board [chuckles].

In this regard, I met, of course, both as a member or chairman, all kinds of political people, especially in the navy. John Warner, for example, now Senator John Warner, was secretary of the navy. For years, he pushed me to put my name in for secretary of the navy. I was getting all this kind of pressure upon me. As I flew to Washington, I would think about this problem in terms of my ten-year career concept. I really felt that people in the universities--and a lot of them do--go into a part-time career with the government and then take a government position at some point. Put up or shut up. Actually take an administrative post.

A lot of people do at the undersecretary level, usually for about a two-year period. If you watch the Washington scene, this is the way people rotate in and out--bring in new ideas, new people. So I gave that serious consideration at various times. But I then was also on the advisory board of the postgraduate naval school down at Monterey. Again, member for five years and chairman for five years. So I gave twenty years of committee duty to the navy, plus other things the navy asked me to do.

I turned down the air force. They wanted me on an advisory committee. I turned down other things. I did say no to a lot of different things. But I found myself going back to Washington more and more. One of the things I'm proud of is I got involved with the Department of the Interior. My name is on a big thick report on waste disposal.

Swent: I noticed that, and I was wondering how that came about.

Maslach: Solid waste disposal. Basically, Commerce put out all of these reports--commissioned these things--we had a lot of good ones. One of them, for example, was "Air Pollution and the Electric Automobile," in 1966, '65. Things we proposed then weren't done until '75. Some of them haven't been done yet in '95 [sic]. It's odd for me to look back and look at those old reports--I don't look at them, actually--but think of those old reports.

There was a big push to use the technique of pushing air down against the water surface, raising a hull, which is designed--hovercraft--and then go out at high speed over the waves. Well, this is used in England, cross channel, and there's a couple of other uses. They were used briefly here in the San Francisco Bay. You make a hell of a racket with this thing. The noise level is extraordinarily high. I was chair of the committee that turned out that report on the future use of the hovercraft concept.

Swent: This was for Commerce?

Maslach: Commerce. It was negative, that there are so many things--there's a lot of research necessary before we could really find something greatly useful. The navy was interested. They were talking about having ships the size of destroyers. When you start looking at the weight, you're talking about--we were not even close, so I got to be known around Washington as someone who could get a report out fast [chuckles] and no nonsense. I used to do these kinds of things pretty fast.

Swent: It's a good reputation to have.

Maslach: I got on all kinds of committees. George Shultz, who is well known to everybody with his career in Washington--Secretary of State and so on--he came to Berkeley when he was dean of the school of business administration at Chicago. I'll tell you a secret. Most of the top people in industry have engineering degrees, followed by a master of business administration. Really--big, big percentage of the CEOs. I'm not talking about the financial top people or the legal top people or the engineering top people. They kind of don't get up to there. I'm talking of CEOs. They are heavily in that category. I learned, from George Shultz.

So he was out here to recruit our students [chuckles] at the bachelor's level to go to Chicago. He did what I was doing at the junior college level. We started a friendship that has lasted until this day, of course. He and I are quite good friends. He went into Washington, of course, and a lot of our people here went into Washington. I don't know if you recall, but when Kennedy made his speech here in the stadium--a hundred thousand people--one of the things he pointed out was that it's false, the concept that the Kennedy administration was basically an administration based on Harvard people. There were more people in the Kennedy administration from Berkeley than from Harvard.

Swent: Really?

Maslach: This was true. You look down at all the secretaries and undersecretaries, why, this was true. He said that's why he felt so close to Berkeley.

A Jet-Set Professor, Going to Washington Many Weekends

Maslach: So anyway, I got into this Washington thing. I'll bring the next time an article<sup>1</sup> that was written primarily about me and also about George Pimentel, professor of chemistry, who was an extraordinary professor. Died of cancer a number of years ago. I literally wept when I last saw him. He was so wasted away. One of the great minds of our time. Heavily involved in the National Science Foundation. That was his Washington trip. But basically it was the jet-set professors, going back and forth.

There were times when I was going every weekend. The process was very simple: you catch the two o'clock flight out of San Francisco; you get into Washington about 10 p.m. By the time you get your bag and you get to your transportation and get to the hotel, you read your newspaper, you watched the eleven o'clock news, and then you just went to bed.

Then you worked all day Saturday, worked all day Sunday, and you got back to the airport--in the beginning there were limousines, but then after that, why, it was the buses and so on. You'd take either the TWA flight at six or the United flight at six-fifteen and arrive, San Francisco time, at about eight o'clock and get your car and all this and that, and get back home ten o'clock at night, say hello to your wife [chuckles], and go to work the next morning.

I set a record when I was working on a committee which was: should we build an SST? This was late in my career at Washington. We came up with: "No." I went eight weekends in a row to get out that report. It was under the direction--we were doing the report for the science advisor to President [Richard M.] Nixon. This was Lee DuBridge, who before that had been president of Caltech and before that had been my boss as director of the Radiation Laboratory at MIT. Lee and I just were good friends. He called upon me many, many times to do these kinds of things. The last time I saw him was in the men's room of the

---

<sup>1</sup>Look, 23 February 1965. "Jet-Age Professors, A Gathering Conflict Disrupts the Dream Life of America's New Elite," p. 36-38.



Faculty Club [laughs]. Sort of an odd place to see him again, but we certainly enjoyed each other.

I would go one weekend, and every once in a while I'd talk my wife, Doris, into coming because I had another set of meetings and then I had to stay, and then we would be in Washington during that time for vacation and then fly back together. We did a number of these trips.

A humorous story is called for here because when Heyns was chancellor and we were having, still, our problems with the Filthy Speech Movement, which followed--Marty Meyerson--and then, of course, we had the Third World Movement disturbances--and trashing of buildings under the period when Heyns was chancellor. He once said, in front of the dean's coordinating advisory committee, that he is now requiring me--Maslach--to tell him whenever I was leaving town because every time I left town, a major crisis erupted. [laughter]

There was a little truth in this. More times than I care to tell you, I would watch the eleven o'clock news, and there was a big disturbance on the Berkeley campus [chuckles]. It was kind of a joke on this jet-age professor business.

#### The Chancellor's Coordinating Advisory Council

Maslach: But getting back to kind of a home ground for a moment, the dean's coordinating advisory council was replicated on the chancellor's level, and the chancellor has his coordinating advisory council, which included all the deans on campus, all the chairmen of the big research units--like the Rad Lab was under the chancellor at that time--a number of top people from the administration business office, and so on. Okay? There was about thirty people. I would come in there. I found out that there was rank [chuckles] and privileges and what have you. I was shown my seat, and it was just down from the dean of L & S. I was sitting next to a friend, who I knew at MIT, who was the director at that time of--the man was Professor Edward McMillan--a Nobel Prize winner.

##

Maslach: Next to me was Martin Meyerson, [at] my first chancellor's advisory meeting. As we introduced ourselves, Martin and I, and from then on--kind of a team. I was deeply involved in all of the internal mechanics of the college, and the changes on the

campus. But he was getting involved in what I would call larger-scale philosophical ideas. I don't know if you ever heard him speak.

Swent: No, I didn't.

Maslach: He was a great orator. He had a fantastic ability with words. He was given all kinds of little nicknames. The Athens of the West, of course, is Berkeley, and here he was. one of the major philosophers of the Athens of the West. Well, that's kind of stretching it, but he hated it, too. But we got to know each other quite well and were working together quite well.

These coordinating council meetings at the chancellor's level during that first year were historical and very, very frightening.

Swent: Was this a new concept?

Maslach: Oh, no, no. The concept was old. In fact, it was replicated not only at the college level by us but it's also replicated by the chancellors meeting with the presidents at the university level. The humorous part was for years they would have great difficulty trying to figure out what to call it at the statewide level because the combination of C's--campus and chancellors and so on --and O's--ended up, they called it the Coo Coo Club. For years, all of the staff was calling it that. Finally, they changed the name and only old-timers like me remember that [chuckles].

### The Free Speech Movement

Maslach: The problem I'm trying to lead into now is going to get into the FSM because through my relations with Ed Strong, I kind of knew what was happening, of course. When the Republicans had their convention, the FSM movement started on the sidewalk outside of campus. Buses from [Nelson] Rockefeller's camp would come and pick up students, put them up into the balconies and also around the Cow Palace, where the convention was held, to cheer for Rockefeller and to boo Goldwater, who eventually, of course, got the nomination. Senator [William] Knowland wrote a letter to Clark Kerr. A copy of it got down, of course, to the campus level. Very secret. He objected to what was happening. Of course, we had nothing to do with it. The sidewalk--the buses were not ours, and there was nothing on the campuses--but they were recruiting people who wanted a free ride to go see the Republican convention and, in the meantime, root for Rockefeller.

I remember seeing those buses. I'd go down when I heard about this. I'd go down to look at them. Of course, Bill Knowland was then known as the senator from China or Taiwan, really, Chiang Kai-shek relationships. He was presidential timbre during those days but never, never made it to the final drawing. The whole thing started with all these little mechanisms, quietly. And then the Free Speech Movement evolved because of the very strange, coincidental, historical moment.

Katherine Towle, wartime head of the women's Marines--she had the highest rank of any woman in the Defense Department--became dean of students here at Berkeley. Wonderful woman and wonderful leader. The infamous day when the police car came out onto Sproul Plaza, she was meeting with student leaders in her office--Sproul Hall--about this problem, which was essentially the placement of advertisement posters and so on. They were restricted from the campus, and they could only be on that strip outside of the campus. You can go there and see the bronze markings of where the Regents' property is and what's city property.

It was essentially these posters and so on that in part blocked the way onto the campus.

Swent: Tables, weren't there also?

Maslach: Tables came later. There were tables there, maybe, on the strip, but mostly they were the big, double cardboard posters. They would keep coming into the area where students would be walking into the campus. The technique was--the table concept was born there--you're right--because that's where people were being harangued to come and listen to this or come and pick up this literature or join this organization and so on. The table fight was really--the communication fight--there on a strip outside of the campus--with all the students being bused out to the convention. This was kind of the beginning of the whole thing.

It's so innocuous when you kind of think about it. But we had on the campus a large number of students who were politically mature and active. We haven't mentioned it in the sixties period--the civil rights movement. The Student Nonviolent Coordinating Committee, SNCC [pronounced Snick]. That was a big operation. You had people that are now historical. You know, Carmichael--Carmichael--Stokely Carmichael, others were national figures long before Malcolm X and so on.

So you kind of went through this period in which there was an increasing activity. When I later talked to the daughter of Ray Garman at General Precision Laboratories in Pleasantville,

New York, where I worked for a couple of years, and who was heavily involved in SNCC, she told me that Berkeley was the most active political campus in the United States. I thought some of the campuses in New York were, but she said, "Oh, no. Berkeley was way far ahead as far as political activity, involvement."

It's true. Take a single example. More people from Berkeley went into the Peace Corps than any other place--overwhelming--into the Peace Corps. I didn't realize that we had all of those elements in a very volatile operation.

When the police car was driven up, Katherine was still up there, and she said--later told me--said, "We were signing the agreement of what we were going to do." This whole problem was being solved in the regular use of the dean of students' office and student leaders. Now, why did the car get onto the Sproul Plaza? Well, the police department is in the basement of Sproul Hall. Cars are parked behind Sproul Hall. A man who I shall not name but who was the business manager of the Berkeley campus at that time--short, stocky man--was infuriated by the fact that tables were being set up. He called the police department and ordered the police car out onto this Sproul Plaza.

Swent: This was a Berkeley city police?

Maslach: No, no. Berkeley campus police. That was how the car got out there. The chancellor's office didn't know a goddamn thing about it. No other academic or administration person was involved. The president's office didn't know anything about it. The whole thing was just remarkable, that some person way down the ladder, in an area that has no responsibility--he had no signature authority, if I may use that phrase that I introduced earlier--to do what he did. That essentially started the FSM movement, because the car was blocked. They let the air out of the tires and so on. The infamous man inside the car was allowed to go out and go to the bathroom and was fed and brought back into the car. You could see all of this. Just watch it, day and night, going on. That's when--Mario Savio and Arthur Goldberg were the two main ones--spoke on top of the car.

Arthur Goldberg, who is still very active here in the Berkeley area, was the stage manager. His secret was he never once let go of the microphone. He would hold that microphone and hold it in front of Savio, and Savio therefore would be able to use both arms in his gesturing and so on. But Arthur Goldberg never, never, never let go of that microphone.

It was a fantasy, a dream coming out. I'd go down there at nights. These sixteen-hour days--I'm not joking. I'd just watch

the dynamics of this whole operation. I remember one night being down there with a neighbor, a young woman who was a student here at Berkeley, and we watched when there was an almost bloody confrontation of what I would call the activists and, on the other hand, the fraternity boys. The fraternity boys were known for drinking their beer but the activists were also. You could just see the tenseness which was induced not just by the philosophical jargon that was being bandied back and forth, but there was almost a point of confrontation. And if the confrontation had occurred, I'm quite sure the fraternity boys would have won because the activists were really rather small in number at that point.

But that was another element that escalated the whole process because fraternities and sororities in general have gone downhill in recent years, and I think it started roughly at about that time. I remember before there were all kinds of things that we used to do on campus. Sponsorship by the Greeks was a very important element. Things that we don't do anymore.

#### Mario Savio, Chemistry Student and FSM Leader

Maslach: The closest I got to this--my own involvement--I met Mario Savio and others, and I talked with them. Savio was an extraordinarily brilliant person. He really was. His brilliance still to this day is not known. He was not academically brilliant. He came from Queens College in New York, along with the key activists--the Goldbergs--and two separate families of Goldbergs, incidentally--all came from the New York City environment.

Now I'm going to say something that everybody is going to laugh at and claim I'm crazy, but I have proof of it. Mario Savio was a student pursuing a degree in chemistry. He was a member of the College of Chemistry, and his field was chemistry. He was not that good a student in chemistry. Of course, many books have been written about the fact that before he got into this activism publicly at Berkeley, he stammered. He had a voice defect and stuttered. But it disappeared once he got on top of that car and made his first famous speech.

He spoke eloquently, and he never again stammered or stuttered. I met him many other times in a more social context. He really knew what he was doing. One thing that should be emphasized is that he was nonviolent. My background is one of the Quaker faith, and I was surprised to hear how he was nonviolent because we were seeing violence. But it's a proven

fact historically that when things got to be physical and violent, he dropped out. He actually left the FSM movement and went into a quiet mode for a number of years.

During that time, for example, he and--I've got a block of the first name--Goldberg--not related to Arthur--were married and had a child. Nineteen sixty-six the child was born in England, on the British system, full payment by the British taxpayer. I know that because I had my operation on my leg in 1966. Had a bad accident skiing, Grindelwald [Switzerland], and I went to England because they had the top bone specialists, and I was asked did I want to have this on the economy--which meant essentially a welfare operation. I said, "No, I'll pay for it, the entire amount." And I did. I was at Nuffield Orthopedic Institute at the very same time Mario's wife was delivering their first child--which was a great, great tragedy because the child was born with Down's syndrome. Could tell immediately. I remember a number of times talking with Mario, and he was holding the baby. It was just a sad, sad period of their life.

Swent: How did they happen to be in England?

Maslach: I don't know how they happened to be in England. They obviously had it all figured out, but they came back from England pretty quickly. I don't know if they just went over to have a baby or not, but that was all.

We attracted a lot of other people, activists. Some of the names escape me now, but one from Princeton came. I always remember seeing him down there on Sproul Plaza. He just looked so out of place. He was in a three-piece suit, complete with vest, tie, white shirt. He still is active around here today, but he's an aging hippie, essentially.

Swent: He didn't have the right costume.

Maslach: Didn't have the right costume. But he was a graduate of Princeton, and he arrived in the beginning of the FSM, pretty quickly, and he took a prominent role. Very articulate person, very good writer. I remember he changed his costume fairly quickly.

Arthur Goldberg and I can't remember the young woman Goldberg. Then, of course, we had other students who were faculty-related--daughters, sons of faculty members here. So Berkeley got its reputation, of course, for this great liberalism.

### An Undercurrent of Factions in the University Administration

Maslach: Within the coordinating council at the chancellor's level, there was an interplay of emotions and administrative activity that I began to notice immediately. The vice chancellor, Alex Sherriffs professor of psychology--but later president of the State College System in the state of California. He was very close to Clark Kerr. We would have these meetings, and we would discuss problems that were developing. You can imagine all the problems we were discussing.

Clark Kerr had been out of the country, over in Japan. He came back and started to get into this FSM thing. Advisory at the beginning, but later to be an active, prominent participant in the negotiations. You had a situation here where the chancellor, Ed Strong, and then Alex, the vice chancellor, and every once in a while I noticed--after we were talking, why, Alex would take off. He obviously got on the phone. At some point later, he would come back, and at some point in the meeting, when we were doing maybe trivial things, he would say, "I just talked to Clark Kerr." We would then hear what Clark Kerr had to say.

So we would begin to see at the very beginning these two people who were close co-workers--Ed Strong, Clark Kerr--now chancellor, president--FSM--you could just see the whole thing becoming a mess, a conflict of two personalities, two people who were quite different, Ed and Clark--very different. In between was Alex, who was carrying tales back and forth. In my opinion, Alex really undermined the chancellor in this regard. Instead of coming and saying, "What should we do?" he was always coming and saying, "This is what should be done." He was not getting direct orders from Clark Kerr; he was, though, talking in his terms.

He had done a very well-known study of students down at Berkeley High School. He was well known in the field of psychology. But there was this undercurrent of factions already in this FSM operation. Everything came to a head, of course, when Ed Strong was removed as chancellor by the Regents, and Clark Kerr--this is a period I'll get to.

### The Strong Influence of Engineers on the Campus

Maslach: I felt that we in Engineering were not heavily involved in the Free Speech Movement, and yet we were. We set a kind of a tone for the campus in ways that never were historically presented by

anybody because people never thought that engineers were that socially conscious. But, just as a humor item, students in engineering and the engineers joint council used to infiltrate the SNCC meetings and also the meetings--I'm trying to think of the follow-up of SNCC. There was another group that had meetings. This was a national group of political activists.

Swent: Students for Democratic--

Maslach: That's it. Students for Democratic Action.

Swent: Or Society. SDS?

Maslach: Maybe it's SDS.

Swent: Students for a Democratic Society, I think it was.

Maslach: That was it. I found out--talked with the people in the engineers joint council. They showed me their weapon, a student by the name of "Tiny," a nickname, Tiny. He stood about six foot six. He was about football-player size, pro football. You know, 250 pounds, solid muscle. He wore a motorcycle outfit because he drove the biggest Harley Davidson you ever saw in your life. He was the stereotype of all of these things [chuckles]. The students say, "We'd always have him and push him up in front." They would vote in these SDS meetings, and these engineering students through infiltration ruined the SDS operation on this campus because they would throw the votes into negatives and vote against taking action.

Also, the students and the faculty in Engineering discussed, with great depth, what they would do if their classes were interrupted. And there were some classes that were interrupted. They never came over to Engineering because, I'll tell you right now, if they did, there would have been violence. I had faculty in many of the departments tell me that there was an agreement with the faculty member and his students that if anybody came in and tried to intercept that they would just shove the interrupters out--out of the building, out, out. That was it. And that would be physical violence. There was no question about that. It never happened, thank God.

#### The Academic Senate Passes the "Time, Place, and Manner" Rules

Maslach: But the Engineering faculty did have an enormous impact in terms of organizing, in terms of the faculty, in terms of what we



should be doing. Remember, I had already started my movement to get people in Engineering more involved in the Academic Senate. We had a greater number of chairmanships and committees and also members of committees, so we were beginning to be more oriented in the Academic Senate.

We would have always the problem of getting out the vote. I won't mention a couple of people because they're still around, and I'm going to say something a little negative here. But people in the Humanities faculty often would call me up and say, "George, this is an important meeting at the Senate. Are we going to get out the vote? Can you get out the vote?" These are the non-activists; these were the more moderates. I got a little fed up with some of them because they were just using us: "Get out the vote, George. Come on, come on. Get the people there." We were just storm troopers to come in and get the vote out.

I told some of them off every once in a while.

Swent: What sorts of things were you voting on?

Maslach: Well, the Academic Senate is any member, ladder-rank faculty--such as professors and a few others in there--you have to remember we're talking a grouping of potentially two thousand people. That's the total membership. During the FSM days, we had our largest meetings. We would fill the Wheeler Hall auditorium, and we would overflow into the back room, which holds about 300 more. So we would have meetings on the order of a thousand people.

The primary thing that was under consideration and was passed was the "time, place, and manner rules"--quotation marks around that. Famous rules. "Time, place, and manner." It started with the use of Sproul Plaza for the tables, the use of Sproul Plaza for the lunchtime meetings, allowing a loud speaker system in Sproul Plaza only during the time from twelve to one, and how you got the speaker, etc., etc. These were "time, place, and manner" rules. You could not do things elsewhere.

I remember dramatically one of the meetings--I remember several of them, in fact--but I remember dramatically one of the meetings. The meeting was held on the last day of a Jewish religious holiday. The holiday, of course, ends at sundown. I would say six o'clock. Our meeting started at five. There was a lot of other things discussed and voted on and so on, until it was almost like the blowing of the horn, the shofar.

The doors of Wheeler Auditorium opened, and in strode easily, in the next half hour, a hundred or so of the Jewish

faculty, who had not come to the Senate meeting until after the holiday was over. I remember laughing with Dean Sandy Elberg, dean of the graduate division. He was the one, of course, that gave me all of the Israeli concepts of blowing the horn at the end of the holiday. It came, and it was at that meeting that was passed the "time, place, and manner"--speaking, political activity on this campus.

Swent: You passed it after six o'clock?

Maslach: Oh, yes. It was seven o'clock before we left that place. These Senate meetings would start at five and go on [until] seven, eight o'clock. I remember when I was a student we, in order to hear a political speaker running for the president--would go down and listen to him speak on Oxford street, and would sit on that lawn at the west entrance of the campus, and he would be parked on a truck and be speaking from the bed of the truck with a loudspeaker system, the off-campus rule. There was no proselytizing--religion or political--no proselytizing on campus. That was the rule. This was the thirties, the forties. I don't know how many speakers I ever heard. And it went on. I remember hearing Adlai Stevenson down there.

So the change in that regulation, which was a Regents regulation, a standing order of the Regents, was, of course, a great benefit to this campus. People don't talk about that aspect of it. They talk about the concept of free speech, but I'm talking about we can have on campus--the Greek Theatre or other places--political figures. We had Kennedy in the stadium, a hundred thousand people. This was wonderful.

After these things were changed, I remember we started--Heyns, I think, was the chancellor--these wonderful meetings in the Greek Theatre. These were campus holidays. Essentially, say from eleven to two or something like that was the campus meeting. I remember hearing Nehru--fantastic speech. And I heard other people. That all came about because the rules were changed. Political figures running for presidential office were out there.

These were great changes that came about, of course, in a very, very messy way.

Swent: Did the Academic Senate change that, or did the Regents?

Maslach: We came up with the idea of how things could be done by the students. But the concept of the getting political figures, that had to be a change in the Regents' orders, and they did that, eventually.

Swent: So these "time, place, and manner" rules were--

Maslach: Local. It was faculty rules. We just--

##

Swent: You were just saying that when you opened the doors and people came in, it was so dramatic.

Maslach: There are a few things I can tell you about all these items. It was truly dramatic because here you were, just debating aimlessly, waiting for time. Everybody knew that we would have this number of faculty who were observing the religious holiday. When the doors opened--I was sitting on the aisle--I simply had to laugh and watch this whole thing because I knew exactly what was going to happen. Of course, it did. We voted the rules, and everything was fine.

We had, as I said, some engineering involvement, some of which I wasn't exactly proud of. I was proud of the students and their involvement, but I was not proud of some of our faculty operations. One group actually sort of set up a security organization. In order to have the Senate meetings and other meetings held without interruption by activists, they essentially stood guard at doorways and stuff like that. Violence never occurred, but it was something of a police state feeling about this whole thing, on campus. I just couldn't believe this was happening.

One of the persons I used to sit with in the chancellor's coordinating meetings was Newman, Frank Newman, professor and dean of law. He was a wonderful guy. He worked his way through college as a piano player. I used to kid him about that. He was actually very good. In the Faculty Club Christmas parties, he was always the piano player. Honky-tonk type piano, you know, for different kinds of singing.

I remember him in one of those chancellor meetings, when things were at the darkest. Frank turned to me--we were talking about the "time, place, and manner" rules--and he predicted that "we are going to be lucky to be able to preserve the sanctity of our classrooms. We are giving up the campus grounds, the lobbies of buildings, the hallways of buildings." He was just very dramatic in that. While he was not proven correct during the Free Speech Movement era of time, later on, when the Third World movement activities were leading to the trashing of buildings, what he predicted did turn out. We did not have control of all these buildings. That's all there was to it. Windows were smashed, right and left--not nearly as bad as they were later on

at Stanford, but here at Berkeley we had quite a bit of that violence during that latter period--not FSM, after the Filthy Speech Movement, which was the next one to come in there.

So anyway, I was in this fantastically enviable position: being big on the Washington scene, touring community colleges, working actively with the curricular development and the budget and developing space, getting new buildings and so on. I was heavily involved in the chancellor's coordinating council. Only a few of us would speak up: the dean of L & S, myself, Martin Meyerson, Frank Newman. That was it, on the academic side.

The people from the business offices and so on who were down at the foot of the table would have their own conversations about other things. Every once in a while, Ed Strong would have to rap his knuckles on the table and tell them to shut up. If they didn't want to participate, they could leave. Of course, everybody would fall silent at that point.

Here was Alex going back and forth. I could see things developing right and left. Now, when I became dean, I had a meeting with Clark Kerr. He and I, of course, had known each other, worked together on various things at the campus level. I saw him a few times at the Quaker meeting. He lists himself as a Quaker, but he is not a member of the meeting. He has never taken the final step. You're either a birth-right Quaker, or you are a Quaker who has adopted the concepts. You must essentially pass a--I'll call it an oral discussion with the elders of the Quaker meeting.

#### A Challenging Conversation with President Clark Kerr

Swent: Which meeting do you go to?

Maslach: On Vine Street.

So we got together, at his insistence. He said, "George, I'd like to have you come down." I said, "Fine." We were talking. Of course, one of the things we were talking about early on was Frances moving down to systemwide, and he was all for that. He was very fond of Frances and her abilities. So we got talking about the College of Engineering. He made a number of statements as to quality. He just didn't think it was there. So at one point I said, "Well, where do you rank us nationwide?" He had us down, oh, tenth, seventh, tenth--something like that.

Well down. And I said, "Oh, no. We're far better than that." Well, I couldn't prove it, since I was just getting into the act.

So he made a statement. We were talking about systemwide engineering, and he said, "For example, UCLA isn't really developing well at all, and that's because the dean there is a former faculty member at Berkeley, L. M. K. Boelter." Well, L. M. K. Boelter was one of the great, great giants of the field of heat transfer and fluid mechanics. But he did have this one concept, which was that you could educate an engineer in a four-year program and turn out this high-level person who is really a Renaissance man.

I disagreed with the concept. It was going backwards into giving greater emphasis on the four-year education and not going forward, like Mike was saying--going on to the graduate work. I countered the Los Angeles argument by saying, "Davis is doing very well, and we helped Davis get started, and we didn't hurt Davis." He said, "Well, it's not that good." He was still defending himself.

And then I just got one of my usual brilliant but nasty ideas, so I said, "Well, you can't blame Santa Barbara on us." Santa Barbara was a campus that had been started and had gone on slowly and is doing very well now--in fact, chemical engineering, for example, just one area, I think it's great; Santa Barbara is well up there nationwide. But in the beginning, Kerr had organized the appointment and the adoption of the faculty of the College of Engineering at Yale, a field which had been disbanded at Yale. The dean and a number of faculty were available, and he had proposed that they come to Santa Barbara. He had done it, of course, through the Santa Barbara chancellor. But here was this group, this whole group of ten people. Of course, that's quite a change in the campus environment.

The Santa Barbara people were not that gung-ho to have the Yale people take over--the dean and everything--and they were against it in part and reviewing, as we do, the appointment of a faculty member of tenure, they turned down quite a few. At some point--and how and why I don't know, but at some point, all of the files of that group came to Berkeley. We were asked to review them. I think this was done by the chancellor's office. I'll get into this a little more later.

But I remember--I was not dean at the time; John Whinnery was--but I remember being on review committees for some of these people. Basically, we only saw maybe two out of this group of ten or twelve that we thought were correct for Santa Barbara, in terms of our standards. So that bolstered the Santa Barbara

position, and they eventually hired maybe three. Santa Barbara was really struggling. Quality was just not there in those early days.

I remember this discussion with Clark Kerr. I'm in his office, which is a beautiful office--spartan, as he was. His chairs were beautiful and designed by Mies van der Rohe--famous architect. They were called the Barcelona chairs. They were chrome-plated and black leather. They had this beautiful line, very comfortable. He had four of them. Beautiful rug and so on. We sat there. This was getting pretty late. I remember it was dusk. But I could see Clark blushed with anger when I told him, "We're not responsible for Santa Barbara." [chuckles] Remember, he's two notches above me in the hierarchy, and I shouldn't be speaking to him in that kind of a tone. But he took it very well. We went on as friends, you know.

#### Achieving One Goal: Berkeley Engineering Ranked at the Top

Maslach: Just to kind of complete the ranking position, before the end of my first year, there was a ranking of all departments--I'm talking--not all, but twenty, thirty departments per campus--of major campuses. This was the first of the big reviews of all universities both private and public. Berkeley came out first, as a university, Berkeley. We had twenty-eight or thirty, departments ranked. Four departments were in engineering. Of course, Harvard--and I knew all about this because my kids in Harvard were sending me all this stuff, you know [chuckles] from the newspapers and the journals in Harvard.

The reasoning was that Berkeley ranked so high because they had those four departments of engineering, which rank high, and Harvard had no engineering. So Harvard was handicapped by not having these four departments. And that's true, but whether that affected the overall ranking--because when you take all the other departments, we rank very high with regard to Harvard and the College of L & S here and the college at Harvard.

I had the great joy of being able to call Clark Kerr. I didn't say, quite, "I told you so." I said, "Clark, did you see that review?" Because in engineering, Berkeley came out second to MIT. [laughs] So I was vindicated by a review which supported me but I really, if you had asked me then, ahead of time, I would not have bet that we would be number two. Maybe down to three. But we were number two. And we were ahead of

number three by a good margin. So I felt pretty good about all of that.

Later on, reviews came and Berkeley always had a very high standing. In the period when Ernie Kuh was the dean of Engineering, following me, a nine-year period following my tenure as dean--Berkeley Engineering achieved number one ranking in the United States, ahead of MIT, ahead of Stanford. Then, after a few years, we had another review, and essentially now in engineering, the latest reviews tend to lump MIT, Stanford, and Berkeley together. We are tied for number one. They don't try to separate us because the differences are so minute, so forget it. So in terms of the ranking, which I had these words with Clark Kerr, I won that argument by having other people proving it. I checked off the first of my assignments from Ed Strong, because when he and I sat down and talked about that ranking and so on, he was just in seventh heaven that Engineering was number two. A close number two; the next time it came around, we were number one. So that aspect was very, very good.

#### Clark Kerr's Enormous Influence on Education

Maslach: But Clark and I were not always adversarial, but we are willing to always debate points. We had a very good rapport--still do--the last time I saw him, we were just crossing campus and we bumped into each other. We just stood there and talked for half an hour about University problems and so on. He had that enormous influence on education--not only nationally but truly internationally. He was one of the architects of the tripartite agreement with the state colleges and the universities and the community colleges.

While Sproul started the articulation concept back in '37, with expansion of the university to all these other campuses--at Santa Barbara we took over a state college down there. That was that original campus. And we gave up rights to have a university campus somewhere else. We gave up the Kellogg-Voorhies site, with that beautiful herd of Arabian horses--came from the Kellogg Foundation. So a lot of these things were discussable, and we carried on a lot of discussions, Clark and I.

In fact--just as kind of a side issue, off to the side here --the last meeting in Clark's home and office here I attended at his invitation. A man in Engineering at Cornell was one of his guests of honor. He and I are old friends, so I was invited. That dinner meeting and discussion of education problems

nationwide occurred just days before Clark Kerr was fired. He knew it was coming, and it was discussed privately at that meeting with a small group. But I do remember that meeting.

You see, Clark did much of his work at home. He had an expanded home--this magnificent view over the bay. His wife, of course, was badly crippled with arthritic conditions. She could barely get around. It was a sad situation to see her. She's such a beautiful person, such a wonderful, active person. She was in Save the Bay activity with Sylvia McLaughlin and so on. He had a large area where you could entertain. It was wonderful to have this meeting. It was a historic meeting in many respects. It was his last meeting of that type.

"Fired with enthusiasm," as he used to joke. The same way he came to the campus. He and I really didn't have any arguments about Engineering because years later--not too many years ago, Clark Kerr made a point of honoring the four people he thought were the builders of the Berkeley campus. These were people like Lincoln Constance, L & S; and Ewald Grether who was the dean of business administration; and Mike O'Brien, dean of Engineering; and Harry Wellman of Agriculture. He really honored Mike. In my discussions with Clark in more recent years, I remember him saying, "I never realized how important Mike was, how good he was. He was ahead of his time." Saying things like that.

#### Maslach's Achievement in Building Faculty Appointments, Advancements

Maslach: Now, along the same way, remember I mentioned building up the rate at which our appointments and advancements were approved at the chancellor's office. [Glenn] Seaborg, who was the chancellor after Kerr, before Strong--when he came back from the Atomic Energy Commission, I used to meet with him at the Faculty Club. I used to sit often at the Chemistry table. I remember Glenn telling me. He said, "You know, when I got to the AEC, I found out how good engineering at Berkeley was." I said, "Yes, you guys were knocking down our appointments all the time."

We laughed about it at that point because I had already been able to build up our appointment rating level. When I left the deanship, as I told you, we were getting 90, 95 percent approval of all of our appointments and promotions.

Swent: This is a function of how many you asked for, too, isn't it?



Maslach: True. At the beginning, I would not send cases that I thought were weak, and people would disagree with me. A chairman would say, "Look, I think he's strong; you think he's weak." I said, "Look, here are the rules." And I'd read them out from the *Academic Personnel Manual*, which I then had. I had my own copy, which I kept right on my desk. It was like a Bible. I said, "I am required, when I forward the case to the chancellor, to put down my opinion on this case. Now, do you want me to express my opinion, which I've expressed to you, to the chancellor? If that case goes to the budget committee and that goes to the ad hoc committees, who will rule on this."

"Oh, yes. Well, okay. I'll take it back. I'll resubmit it." [chuckles]

And so at the beginning, believe it or not, I was turning down about 35 percent of the cases that were submitted to me as dean. We were not sending poor cases forward. Part of our problem was our own. We just had poorly prepared cases. It wasn't until I wrote the manual for the preparation of cases that we had a uniformity in preparation of cases. The budget committee chairman asked me for a copy of that manual, and he gave it to other deans [chuckles].

In many respects, I look upon my activity in changing that ratio and the bringing in of faculty--not me, personally, but giving the chairmen the budgetary wherewithal to go out and recruit top faculty--I think that was my greatest contribution to the college, was the increase of curricular and graduate work, and to get those faculty. That, to me, was the most important thing I did at that time. Getting buildings and other things working with students was all part of it, but the best thing, of course, was the faculty.

#### Activities with Students and the Engineers Joint Council

Maslach: I want to kind of end this FSM period by pointing out what happened there with regard to myself and the students. I was always active with the students. I set up in my time various ways to meet with students. Engineers Joint council, which is a composition of all these student groups--the professional groups, like the ASME [American Society of Mechanical Engineers] students, the Society of Civil Engineering students--but then they have also their other groups, which they, themselves, want. They're not part of a national scene. So there were about a dozen societies.

Swent: May I just ask one quick question?

Maslach: Yes.

Swent: I noticed that you joined some of these societies later. Tau Beta Pi?

Maslach: Well, Tau Beta Pi, they incorporated me. That's an honor society that I did not get as a student--

Swent: But that came later?

Maslach: Sigma Xi also. That's an honor society, really.

Swent: But you didn't get those as a student.

Maslach: No. I got those because I was the dean. That's a good point. I forgot to say that.

Swent: They suddenly pop up when you're--

Maslach: That's what I was saying. When I became dean, all of sudden all these things happen, because I'm dean--not because I'm George Maslach. I'm dean. So they're really honors to the college in that regard.

But when the students had the FSM period thrust upon them, all kinds of things happened. The students had offices--EJC had its office on the other side of campus, in the student building. We had other groups who were there. For example--not engineering, but the choir, the music societies, the band, the jazz band--they had offices over there.

Swent: Over there. You mean the other end of the campus from the Engineering.

Maslach: On the south side. There's a big line of demarcation if you look at this campus, and that is University Way, going right up and down the campus. Most of the professional schools and colleges are north and a few south; most of L & S is south, a couple of them are north--which, incidentally, was the brainchild of Clark Kerr, to kind of try to mix the campus. The theory was always found humorous by the people who were against it. They used to call it the theory of the faculty meeting in the men's room.

As an example, there were no voting booths north of the campus for student voting. They were all south of the campus. The one closest to us was on the north side of the library. All of a sudden, when the activists took over control of the ASUC

[Associated Students of the University of California], all of these groups were shoved out of their offices--literally, brutally, now--out, out now. So the EJC was just dumfounded--what are we going to do?

They came to me. This was one of my strange space problems. I said, "I'll try to find space." I looked around, looked around. I found a lot of little places, but I found nothing really very good. And then I found, through my campus space people, a wonderful room, unknown to almost everyone, in the upper levels of the old architecture building, which is now Northgate Hall, journalism. Upstairs there's a room, believe it or not. I challenge you to find the stairway to get there! So this room was up for grabs, so I grabbed it. EJC loved it. It was like one of those little attic places, like a little warren, where all the kids would get together and talk. It was just perfect for them. It was just marvelous the way that room and the crisis of being thrown out of their office brought the EJC together. They were really kind of angry at what had happened to them over on the south side, and they were moving ahead.

I used to go up there and meet with them. It was a lot more comfortable to meet there than in my office. I had a theory to go out to meet on people's turf, not just bring them into my turf. Bringing people into my turf meant that I was angry at something or there was a real crisis or something, so I tried to low-key it.

One of the groups that was shoved out was *Cal[ifornia] Engineer*, the magazine put out by the Cal[ifornia] Engineering Society. I wondered what the heck we could be doing. The *Cal Engineer*--they needed room and so on. At the same time, I learned that I had an alumni society. I was called by Bob Andreasen of Standard Oil Company. There are two Bob Andreasens, incidentally in the Engineering Alumni Society, northern Bob; and southern Bob.

### The Engineering Alumni Society

Maslach: Bob called me up and said--we were graduated, incidentally, in the same year. So, "Hey, George, what do you think of having an alumni society?" I said I thought that's a great idea. How do we do it? What do we have to do? He said, "You've got one." And there was this society, formed about three years earlier. I didn't know about it. It was very small, the Engineering Alumni

Society. I couldn't believe this. "So let's get the officers together on this thing."

I said, "Okay. Let me host a dinner at the Faculty Club." That was great. We had the officers there, and I knew some of them; others I did not know.

What had happened was that the society in the first couple of years was just building up and getting a list of people and stuff like that. Then one of--the third president died, in office, and so the thing just went dormant. There was a general feeling amongst people against Berkeley campus, FSM, and so on. "I'm not going to contribute another dollar until you clean up that mess at Berkeley." That's what we were hearing. Some good friends of mine.

So we had this meeting. All of a sudden, I found we had a great alumni society, just wonderful. We used to meet regularly. After a while, the Faculty Club was the place, and Dave Brown was in charge of providing a box of liquor because the Faculty Club did not have a liquor license, and we would get set ups--glasses and ice--and we would meet in one of the private rooms and keep down the noise [chuckles], and we just had this wonderful relationship.

#### Increasing the Subscriptions of *California Engineer*

Maslach: I'll speak more of the Alumni Society, but I brought it in at this point because just about the time we were revitalizing the society, *Cal Engineer* was facing bad times. We met with *Cal Engineer* editors. I had the idea, "Hey, what you need is larger subscription." They did not have many subscriptions. They sold it. They sold a lot, of course, in engineering. But I said, "We've got the Alumni Society. How about the Alumni Society coming up with the money for subscriptions--every member of the Alumni Society."

The Alumni Society thought that was the greatest idea I've ever had. So all of a sudden, the *Cal Engineer*, which had a small--two hundred subscriptions--had thousands of subscribers. Overnight, they went from being bankrupt to going full steam. And so in this way the dean's office was the catalyst.

It so happened that all these things were happening at the same time, believe it or not. You can't believe that the juxtaposition of all these problems--

##

Swent: You were just saying the juxtaposition of all these problems and the solution to them.

Maslach: It became a wonderful opportunity. In every crisis there was an opportunity.

Swent: And you were also open to--

Changing ASUC by Getting Voting Booths on the North Side of Campus

Maslach: I got fed up with this damn lack of political representation over here in Engineering, which was due simply to the fact that there were no voting booths. I got hold of the committee at ASUC--in charge of voting--and I complained mightily. They pay these people to operate these booths. They said they did not have the money in the budget--

Swent: These are the student elections.

Maslach: Yes, student elections. I said, "Okay, I'll put up the money. You put up a booth in the Engineering courtyard, and you put another booth down at Northgate"--which was an entrance. They had several booths set up in the south side. And I said, "I'll pop for it, whatever it costs." Well, I put up the money for the poll watchers, essentially, and the woman that sat there and gave out the ballots and you went in and marked them up.

It was amazing what that did. Some of the students here on this side of the campus--I'm not talking just Engineering--Social Welfare, Agriculture--we set up a booth down there later. I paid for this. I remember they set up a booth over there in Environmental Design, up there at College and Bancroft. We had changed immediately the whole voting pattern of the ASUC, which up to this time had been basically--the ASUC was an L & S organization, when you got right down to it.

Not too many years ago--and, in fact, a few years after we got our booths, there was a political party. It was the Engineering Science Party. They dominated ASUC for a number of years. We got out the vote because we had the booths right there, and I was telling the EJC people, "Hey, we've got to get out that vote." It was the only way to get moving in politics, to get out the vote. Boy, we got out the vote, and so we changed

many of the things that happened here, in the aftermath of the FSM period.

If you look at it, we had the faculty of the college heading up committees in the Academic Senate, and we had students being active in the ASUC. It was really quite a change. And it all came out of that FSM period of turmoil--one of the good things. This campus became more of a university in many, many respects.

The student groups have flourished, Cal Engineering has flourished, and the Alumni Society has flourished. I take no credit for the Alumni Society; they were already organized before--

Swent: You are given credit for that.

Maslach: I revitalized them by my enthusiasm for their activities. Today we have a much larger Alumni Society. In the beginning, first year that I was dean and they were meeting here at the Faculty Club, they gave us one thousand dollars for discretionary funds, to be used by the dean. Nowadays they give ten million. It's a major fundraising organization for Engineering. And that is just part of the whole Engineering fundraising operation.

Swent: That's something we haven't even touched.

Maslach: No, we'll have to get on to that, too.

Swent: That has been a big change.

Maslach: During this whole period, before I left the deanship, there were other momentous activities. Clark Kerr had proposed and the Regents adopted a concept of going on a quarter system. In '66 we went onto the quarter system. I'd like to single out John Weyhausen, whom I mentioned earlier, Naval Architecture. He was the chairman of our committee to transform us from a semester to a quarter operation, and also a member of the campus committee, responsible for the entire campus. John is so competent and creative. I was always worried about how each course had to be reviewed and restructured and so on.

I got into this whole thing in the beginning because I saw here an opportunity to check off that third mark of things that I was supposed to do for Ed Strong. We were already now, by '66, recognized as the number two, say, in the nation in engineering, and we were getting better; and we had already gotten lots of people into the Academic Senate. I had been chipping away on this problem of the 120-unit, semester-unit curriculum for the bachelor's degree.

One night I suddenly realized--I couldn't sleep that well that night. Something was on my mind. If I cannot blank my mind (which I can, and I immediately go to sleep), I've got to get rid of that thing up there. So it was an idea. Basically, it was why don't we, when we reorganize each course, we restructure the curriculum, we move from 120 to 180 quarter credits. Cut down from the 138 semester units that we needed for that four-and-a-half-year degree. Let's do it in concert, everybody.

My concept was--and this is what I was dreaming about--that any course would drop a little piece of its course, and the aggregate of what we dropped out when we cleaned up all these courses would amount to the difference in the number of units. For example, in mechanical engineering and in civil engineering there are three courses that teach essentially the same thing--one little area. Well, if two of them dropped it and one had the primary responsibility, why, guess what: You've got so many semester hours of free time.

So we went into this restructuring thing with the whole concept of--I made it a decanal order; it was from one of my retreats. I just arbitrarily set it. I had a hell of a lot of chutzpa, but I got away with it! We had this dean's coordinating advisory committee council, and I said, "There's just no way we can do it piecemeal. We've got to do it all at one time. Everybody can drop their stuff, and no one will notice the clatter of this stuff hitting the floor." Everybody laughed and said, Okay, okay. We achieved in our restructuring in 1966 a true four-year curriculum. That was really quite something.

Swent: You did it just sort of by analysis.

Maslach: Well, analysis first. I could see lots of stuff that could be dropped, and then I also did it by brute force, saying, "We're going to do it." And then I got a lot of agreement because, you see, you could talk to, say, electrical engineers and say, One of the things we ought to do in the lower division, we ought to cut back on the graphics curriculum. That was pretty well in the mind of everybody. But, boy, they loved that concept. They had gotten their course in there, Engineering 17, and they felt pretty good. But they thought that other stuff was outmoded and outdated, so we did it kind of by agreement and threat.

Remember, I told you a guy from Caltech told me, "I sit around a cocktail table with a full bottle of bourbon, and by the time that bottle was empty, we achieved our commitment." Well, I never did it quite that way, but I did spend a lot of time going around to each unit, each department, talking about their

problems. There was a lot of out-of-the-office politicking. Academic politicking is what it was.

Swent: I think we're a few minutes before twelve. Maybe we ought to stop.

Maslach: What I want to take up--I'll give you a teaser on this--is that I want to complete this outline deanship, and I'll try to culminate the whole deanship concept afterwards, but there's one more thread here which is very important, which I have mentioned but I have not elaborated on. It's basically my political instincts. This has been important all my life without my even knowing it.

In 1959, as I told you earlier, I was fortunate very casually to meet Jack Kennedy and his brother, Ted, when they were here and were running in a motorcade--Doris and I--for Kennedy and "Sparky" Avakian, who was a judge in the local area. I think he was a judge at that time. It might have been when he was a member of the school board. But anyway, it was a joint motorcade through the city of Berkeley with Jack Kennedy. Ted Kennedy was in his office, and I met him at that time.

Well, that was nothing that I would have dreamt would have led to a lot of the activity that I got into, in part because of being in Washington. That's the other thread in this whole network. I was going to Washington so much, first technically and next as dean, and then as member of all these committees. I was on committee after committee. I overdid it; there's no question. I said no to a lot, but I did overdo it in terms of the amount of time I lost with my family and the amount of time I lost in terms of doing research in the field of upper air dynamics--rarefied gas dynamics is the best term.

I developed a whole political life, in which I met all kinds of people all over the world and was influential, or at least participated in, all kinds of decisions that I never could have expected. For example, I was involved in the Vietnam peace treaty.

Swent: Were you really?

Maslach: These are the kinds of things you can say, "Wait a minute. What were you doing there? How the hell did you get there?" [chuckles]

Swent: It sounds as if you enjoyed it, though.

Maslach: Well, I enjoyed a lot of it. But it's a life in which I went through and I met people and I could evaluate them, and I have



new feelings towards them. For example, I worked like a dog to try to get Adlai Stevenson the presidency. I spent days--I mean, a full day, from early morning till late at night, taking people to voting booths. Later, when I went back to look at the voting records of that precinct, I found out I was doing nothing but taking people over there to vote for Eisenhower. In one precinct there, I probably took thirty, forty people, and that precinct was about 150 votes, and the number of Stevenson votes was, like, five. So I helped Eisenhower [chuckles] in that regard. But I had to learn, you know, about this whole political mess. But that's a whole new area.

It impinges upon the college work and the activity of the college. Don't get me wrong. And kind of is a prelude in many respects to the work at the chancellor's level, the provost level. It's part of the whole thing. It had a big effect on a number of things within the college. So that's when I got started.

Okay. Call it quits.

### Political Aspects

[Interview 8: February 18, 1999] ##

Swent: This is Eleanor Swent, and we're continuing the interview with George Maslach on February 18th, 1999. This is the eighth interview, Tape #21, so we're coming right along.

Maslach: We ought to step up the pace maybe.

Swent: No--

Maslach: At least finish it up. But we are getting pretty far along on my life history here.

Swent: Yes.

Maslach: Today I'd like to start by saying that this is another coincidence that relates to this oral history. Yesterday I started thinking about the political role I played while dean and provost, and I want to start out by mentioning a few names in my background when I was a kid.

One of them is a man by the name of Jeffrey Cohelan, best known in Berkeley as a congressman. He and I were Boy Scouts in

the same troop in San Francisco. He was the first Eagle Scout in the troop, my brother was the second, and I was the third. It seems so coincidental. Here I am, hours after reading this death notice, and he's the man that I was going to start talking about. The coincidence is getting too, too personal.

I did want to take one period of the interview session to talk about this whole political activity I was engaged in and put the hindsight of years of thinking about it--I'm sort of able to put it into perspective. I think there must be something genetically that I inherited that made me be so political, especially at the national scene. When I was a kid, as a family we got to know the Mailliards. Bill Mailliard became a congressman. I've already related that to you in my oral history, in which we used our daughter, Christina, as a model for a Polish girl when he was running for his first term as representative. And now here she is, a well-known professor of psychology at Berkeley.

Swent: Christina, that is.

Maslach: During my father's activities in the political arena--because he was so prominent in the Polish insider clubs in California--we would have letters from Franklin Roosevelt and Herbert Hoover, asking for his support. Political activity was part of the whole family scene. My mother was not active as much as my father. Of course, it was nice to meet Paderewski when he came through on a concert tour, because he was a Polish activist and premier at that time of the Polish state.

I remember voting for Franklin Roosevelt for his fourth term, in Boston. That was my first national voting. It was rather interesting because we also voted for a man who later became a representative, in Boston, an Irish politician.

#### Making Changes in the Berkeley School Board

Maslach: But it wasn't until Doris and I came to Berkeley that we really started getting politically active at the local level. We ran campaigns for school board and city council. They changed the school board from five to zero against us to five to zero for us, and that's when people like Paul Sanazaro, Sparky Avakian, and so on came into our life, because we were able to recruit them to work and run for the school board.

Vic Bottari, incidentally, was one of the people we defeated in the school board race. He had been a long-time member of the Berkeley school board, a former football hero here at UC Berkeley when we were in school, All-American football player.

Swent: You said for and against us. What was your agenda?

Maslach: The agenda of the school board up to that time was very, very conservative. The main first thing that we were interested in was increasing the budget. School board members at the time did not want to increase the budget and therefore the taxes, so we ran a campaign for increasing the taxes. Our measures were given the initials N and O. And so in their campaign literature, they would say, "Vote no on NO." Of course, in our campaign literature, we pushed, "Vote yes on NO," which sort of gave it a little twist.

Doris is really the one that worked on it. In those days, we didn't have women's liberation yet. For example, in the Emerson School PTA, the presidency of the PTA was shared, a couple, and so the man and the wife would be co-presidents.

We were very successful in that first campaign and passed the measure immediately, with I think 85 percent of the vote for us.

Swent: What kinds of things did you do when you say you ran the campaign? What kind of thing were you doing?

Maslach: The main thing is--in fact, she is still running campaigns. Just this last year, for rent board people. But it's a matter of doing all kinds of little minutiae, including the paperwork of getting on the ballot, getting sponsors, which would be then printed on the ballots--because the sponsors' names are very important. I, for example, always look at sponsors' names before I vote for someone. The enemy of my enemy is my friend, you might say. Actually, I look positively on the sponsors list.

Then there is, of course, fund raising. None of these campaigns come cheap. Even a school board membership, why, you're talking today probably fifty thousand. There are people who do this as a job. There are other people who prepare material for the campaign--the posters you see on the telephone poles and everything else, all kinds of mailings.

I remember once, I was dean of engineering, and I was involved in a campaign, probably a school board campaign, and in a brown, unmarked envelope came a printout of tabs for mailing purposes--someone who had access to the mailing facilities of the

University of California. These were all the tabs for the city of Berkeley--staff and faculty. There it was. Just a roll.

Swent: Like a label?

Maslach: Yes, like a label which you put onto an envelope. It's a great time-saver. The only thing was it was implicating because there is a code number which had to be trimmed off with scissors [chuckles] before we put it on the envelope. Of course, these were not necessarily voters, so the whole thing had to be checked against the voter registration list. But it was a valuable thing that came through the mail, totally anonymous. But I was pretty well known on campus for these activities.

I was also, of course, known--as I've told you, because I was dean of engineering--to get out the vote of the faculty on Academic Senate meetings. For a while, I did it, you know, without any grumbling, but a couple of times I was very put out by the attitude of people who would call me up--these were liberals from the College of Letters and Science--urging me to get out the vote. I told off one of them. I said, "I feel whenever I get a call from you that all you're going to do is ask me to do something. And I'm getting tired of your telling me what I should do. I know what to do." I don't think we ever talked to each other again after this.

#### Political Contacts at the National Level

##### Professor Richard Folsom

Maslach: But the big thing in terms of political activity was at the national scene. First, Dick Folsom, who had been a professor here at Berkeley, had gone to Michigan, where he was head of the Institute of Engineering Research. I was his counterpart here at Berkeley for a number of years. But Michigan had a much larger operation. After that, he left Michigan and went to Rensselaer Polytechnic Institute in Troy, New York.

He recommended me to be on the Annapolis advisory board--this is the academic advisory board. I spent a career with the navy--ten years on the Annapolis [U.S. Naval Academy] board, five years during which time I was chairman, and later ten years on the Academic Advisory Board of the Naval Postgraduate School at Monterey, five years of which I was chairman. Twenty years of

service on committees sounds like an awful lot. It was, but it was great fun.

Swent: Was there any pay involved?

Maslach: No pay involved at all.

Swent: They paid your expenses?

Maslach: The navy did a good job. Of course, they would pick up your expenses and travel and so on, but in Monterey, for example, the navy school is headquartered in the old Del Monte Hotel, and a number of the rooms were maintained--wood-paneled suites, really. And I recall Doris and I would go down and stay in these suites. While she visited other people, I was working on the board.

In fact, Jeff Cohelan was on one of those boards with me for a number of years, so we would see Jeff when we were down there as well.

#### Admiral Starr King

Maslach: But in Annapolis, they had you staying in the homes of captains on the faculty. I met a number of the faculty people there, including a wonderful man who later went on to admiral, who was Starr King. Of course, that's a famous name here in California history, and I have climbed Mt. Starr King in Yosemite.

So I started to meet people intimately in this way. My activities with the naval board at Annapolis was in getting computers into the curriculum. I went to their so-called computer center, which was a very small computer which today would register nothing on a scale of one. [chuckles]

#### Herbert Holloman

Maslach: At the same time, Earl Parker had a friend by the name of Herbert Holloman. Herbert Holloman was assistant secretary of commerce, Department of Commerce. Parker recommended me to Holloman, to be a member of what was called the Commerce Technical Advisory Board. Right off the bat, here I am involved with two committees in Washington--in the area, that is--and I was meeting all kinds of people, right and left, including political people. The

Commerce Technical Advisory Board was loaded with executives of major corporations--banks and what have you, people from New York--I remember Princeton University being represented and Harvard and so on.

And then the same thing occurred on the Naval Academic Advisory Board. We had big names from corporations as well as alumni who were very successful, alumni from Annapolis. And we had a number of admirals who were just retired, for example. So we had a very broad representation of people. Every one of them had a big background, and they had a lot of influence. This is what I recall.

#### Admiral William R. Smedberg

Maslach: One of the nicer things, on the naval board was one of the admirals, Admiral Smedberg. There is a Smedberg Lake, close to Mt. Conness, the Tuolumne Meadows area in Yosemite. I said, "Gee, I've been at Smedberg Lake." And he just couldn't believe it. Actually, his grandfather, who was a surveyor for the U.S. Coast and Geodetic Survey, and was on the original survey of the state of California. One of the triangulation points is Mt. Conness. I have actually climbed Conness, and you can see where they had their camp. There's a remnant of glacier up there--at least a big snow pile that never melts--and then you can see the marker of the U.S. Geodetic Survey.

It's kind of scary to get over to that marker because it's on a peak point that--the granite has eroded, so as you step from the mountain proper onto this slightly separated peak, you can look down on one side or the other, and it's at least a thousand-foot fall, and it's just a narrow thing, and you have to cross a gap of about a foot or eighteen inches. So you don't do it casually [chuckles].

Anyway, Smedberg and I became close friends--and, of course, the other admirals. The top admiral we had was a man by the name of Rivero, "Rivets" Rivero, they called him, because he was quite short. Some people claimed he was under the legal limit, but he went to Annapolis, and he was an admiral--the top level, four-star.

I then, of course, automatically got acquainted with cabinet members through Commerce and navy and cabinet members of the navy board. In Commerce, Herb was a very dynamic person. A tragic death. He was partially paralyzed many years later and he

retired into work at MIT, but he was a very creative person with lots of ideas. His was a very active committee. I think I was going there regularly, every month. So that's what started me flying back and forth very actively.

#### Paul Nitze

Maslach: I met through the navy Paul Nitze, a well-known secretary of the navy, who then went on to a distinguished career in developing peace. I didn't realize our careers would cross back and forth, but they did. I always thought that one of the things that I was interested in doing in the Washington scene was working with Paul because he did an awful lot in nuclear treaties and other kinds of non-State Department type peacekeeping missions. His name will go down in history as one of the leaders in this field.

Swent: Was he a scientist or an engineer, as well?

Maslach: No. His background was law. I was always very impressed with him. He was there when I made my first talk before the board about the need to work in the field of computers, and that impressed him mightily. He, in fact, pushed for years that I should become secretary of navy. I would always say yes, yes, but I really--

#### John Warner

Maslach: I also met John Warner, who was secretary of the navy after Paul Nitze. John is senator in the federal government today. You see him, a rugged fellow--big shock of steel-grey hair. And was best known--for a while, he was married to Elizabeth Taylor [chuckles]. He was another one who was constantly pushing me to be secretary of the navy.

Swent: Were you tempted at all?

Maslach: Well, it will come out later that I was tempted in a lot of ways, but not really with the navy secretaryship. It's sort of a backwater, dead-end, very valuable, but not the political activity as much as it is a maintenance of an ongoing activity.

## McGeorge Bundy and Ford Foundation

Maslach: "Mac" [McGeorge] Bundy, who was chief of staff for Kennedy and was later in the Johnson administration--he went on to head up the Ford Foundation. He also used me in a variety of committees. For a while, I was going to the Ford Foundation and New York City, on 42nd Street, just down from Grand Central--a very convenient location. They always did things up in true style. The meals that we had at the Ford Foundation were gourmet meals that you could not believe. There were waiters in dress outfits; just amazing. It was all catered, of course. Or some of it was Ford Foundation staff, for the coffee breaks and stuff like that, but it was really a beautiful building and a beautiful group of people to work for.

One of the things I remember is that at that time, first-class seats--there was no business class--were available from Washington, D.C. to San Francisco at about twenty-five dollars over the price of what we called steerage. You would race into the airport at Dulles, put in your tickets, and say, "Are there seats in first class?" If there were, why, you would pay the twenty-five dollars out of your pocket, because you got a much better meal, and the drinks were free [chuckles].

## S. I. Hayakawa

Maslach: One of the times I got in there, and my seatmate was S. I. Hayakawa, who was at that time president of San Francisco State University and best known for his tam o'shanter and his ripping the wires out of a loudspeaker system, stopping a demonstration at San Francisco State. Someone was sitting next to him in my seat and talking with him, congratulating him, obviously. I waited, and I sat down and introduced myself. San Francisco State--or at least he--did not have a good opinion of Berkeley. It might be just an institutional rivalry, but it might have also been personal.

So he started asking me--because I introduced myself as an aeronautical engineer and dean--he asked me what this was on the plane outside on the wings. They have these little shapes that come up out of the wing that are called spoilers, and so I had to explain that and fluid mechanics in terms of why they were there. I was explaining other things. We were flying along--an overcast, a stormy day, and I could see the front ahead of us. I said one of the reasons I took this airline--and I think it was



United--is that TWA went first, and they have to report the weather.

I pointed out I was a consultant for the Federal Aviation Administration, and whenever something happened on a flight, I was to report what had happened, for the investigation if there were some damages or whatever. I remember telling him to sit upright and lightly, and through his buttocks he could feel the automatic pilot, because it goes left for a second and then goes right for a second, and you could feel--the whole plane kind of moves a little, and you have to be alert to it. This was part of the expression "flying by the seat of your pants." It's a little more technical, but people still use that expression.

I said, "The pilot will get a change in altitude, and he'll report this front, and he'll get the record from the flight in front of him." I kept looking, and this front was getting closer and closer, so I finished my drink, tightened my seat belt, and told him to do the same thing. I said, "We're going to have a little rough weather." He didn't pay any attention to me. We hit that front head-on. It was on automatic pilot the entire time. I can't understand it. Anyway, the plane dropped about 6000 feet, straight down, flat. In front of me there were these glasses of liquor and water and what have you, just floating up there--more than an acceleration of gravity, and the cart with the liquor was just--people were screaming. People were getting thrown into the aisles because they did not have their seat belts on. They had been told, maybe, but they didn't do it. It was a royal mess.

Of course, the people picked everything up and started putting things back together--the stewardesses and so on--and then the copilot came out, and I pulled my wallet out and I held up my FAA card, and he just, "[making groaning sound]"--because he knew that I would be reporting. I turned to Hayakawa. He was drinking bourbon, straight, with a glass of water on the side. He had this glass of water with bourbon all over him. Of course, they came through later with vouchers for cleaning and stuff like that.

When I came into San Francisco, the FAA were there to meet me, and I went up and reported what had happened. Hayakawa's only remark to me, I think, for the rest of the trip was, "Why the hell aren't you flying this plane?" [laughter]

### Bill Mailliard and Byron Rumford

Maslach: But you meet people, of course, coming back and forth. Sometimes I'd see Bill Mailliard coming home to his district. Byron Rumford was a man that was in the state legislature but then also, later, in the Congress. He was a constant flyer. I would see him, and whenever we saw each other, we would always get seats together because we had a lot to talk about, Rumford being well known for his housing acts here and also the labor act for the state of California, which was copied widely throughout the United States.

### Work with the Ford Foundation

Swent: What were you doing for the Ford Foundation? What was that connection?

Maslach: They had me in for a couple of things. The first thing is that we at Berkeley had a grant--that's why I became dean--to help the Universidad Catolica in Chile and to build it up. We did a very fine job there. I had very little to do with it. I never went down to visit, although I could have--something I regret today, but--we had a very active program, with faculty down there. The university ended as a first-class institution in the technical sense. We're talking about engineering.

Then we also, later on--and this I was involved in at the beginning--had an international program with the Ford Foundation in India. India was involved with the building of four major universities--one developed by the government of India itself; another, by the Russian government; another, by the British government; and another, by the United States government. The Ford Foundation was central to this, was to be the operator.

It was a wonderful program--probably never will be duplicated--because we had, I think, twelve to fifteen major universities involved, and Berkeley was one of them. Here you have in the Midwest major universities like Michigan and in the East, MIT, and the West, UC Berkeley--also a lot of others: Colorado and you had the School of Mines in South Dakota and so on. All these universities pledged to send a certain number of faculty to teach there. The minimum time was one year, maybe two-year stints.

This was a fantastic program, very similar to the program with this one university here at Berkeley, working in Indonesia. I think I talked about that earlier, several hours ago. Just to keep the record straight, I'll just mention it. Before becoming dean--in fact, before becoming a tenured professor, I worked in the development of a program for UC Berkeley to help the University of Bandung.

Swent: I don't believe we talked about that.

Maslach: We haven't talked about that?

Swent: I don't think so.

Maslach: It would have changed my life if the program had gone through, but at the last minute, the government--federal government, that is--wanted a clause in the contract which would require all correspondence and all reporting--especially reporting--to be reviewed by them. In other words, they had a censor on whatever reports we made. We simply, as a university, could not take that, and we pointed out that's contrary to our standards, and that's it. It got to be kind of heated. We just walked away from the contract, after having done all the paperwork.

The University of Kentucky came in, I think the federal government found them, and they just took over. They took everything. They apologized because they knew that they had agreed to allow this censorship. They took over that program at Bandung, which is a major and very good university in Indonesia.

The federal government later changed its mind on that clause, and UC San Francisco, for example, ran a very fine program in pharmacology at Jakarta. And UCLA ran an engineering program in Yogyakarta, which is halfway down the island, towards Bali.

This was my first contact with foreign programs, but it was a failure. But I was really front man out in Jakarta and in Bandung. And Howard Eberhart, who was the co-worker with me on developing this whole program, was to be the man here in Berkeley recruiting faculty to go to Indonesia.

Swent: It was just an exchange of faculty, not of students?

Maslach: Not of students, no. I had a lot of contact with the Ford Foundation. They obviously liked what I did, so I was on an international program committee, and later I was on an engineering--within the United States--committee. So I got to know Bundy quite well. I always remember he had that broad

Harvard accent. When he said, "Just call me Mac," it came out sounding almost like Mike [chuckles]. I looked at him twice before I realized it was just his accent I couldn't understand.

But things developed. For example--

##

Maslach: But things developed, just by themselves. Just the normal sequence of events in the Washington area, you meet people right and left. For example, the Commerce Technical Advisory Board had done quite a bit with the electrical automobile and air pollution and had done other things on cleaning up the landscape of the United States--pushing a variety of purchasing programs. Holloman did this all the time.

For example, since the federal government buys thousands of vehicles, okay, let's have a program in which so many of these vehicles are experimental, for cutting down air pollution. The purchase of jeeps for the Post Office, which was then a federal office, was an example of where we did an awful lot of clean-up of the air.

But one day, I remember coming back to Washington, and we were told that in the afternoon--this was a weekend, remember--we had gone there on Friday and then worked all day Saturday and Sunday--but on Saturday afternoon, we were to go en masse to the State Department auditorium and listen to Mrs. Lyndon Johnson speak on her idea of beautifying America, something that she really worked on for many, many years--did a very good job.

President and Mrs. Lyndon Johnson

Maslach: I remember going there and having an almost front-row seat with all these capitol people and so on. I was listening to her, and I honest to God must tell you that I understood less than half of what she said. She had such a thick Texan, Southern accent that I really--oh, it was horrible--and this was obviously known. It was pointed out at that time. I remember listening to a tape afterwards, and it wasn't me--it was everybody else, as well, who had had this problem. If you did not come from the South, why, it was a difficult problem. She went to voice school and everything else and changed, and she's an outstanding speaker today. I heard her later.

But one of the benefits of this thing, of listening to this speech, was we all got into the bus and went to the White House, and we went through the security check, and there we are, out in the Rose Garden, listening to the President [chuckles], so you met the President. And I met the vice president somewhere, Hubert Humphrey. You know, the Washington scene.

Swent: It must have been pretty exciting.

Maslach: It was fun. But I kind of overdid it because I was on an Interior Department committee--you saw the volume in my vitae. I wrote the section on solid waste disposal for a report that is still, today, valid and has a thousand or more ideas, resolutions, of what should be done, that could be applied today. A lot of it has been applied, of course, over the thirty years since I did that. But it was not just solid waste. Mine was the section on solid waste. The report is about an inch and a quarter thick, and it covers air pollution and it covers water pollution, as well.

#### Henry "Scoop" Jackson and EPA

Maslach: That took a lot of time, but the people in Interior got to know me, and that's how I met the botanist who worked with me on the solid waste disposal. He introduced me to "Scoop" Jackson. And that's how I got involved in helping write the legislation for the Environmental Protection Agency. Scoop and I got to know each other, and I was very impressed with him, a liberal Republican who voted Democratic pretty much most of the time. He was up in the state of Washington. We, of course, would talk about the West Coast and so on. I was asked, kind of tenuously, to be involved in the administration of the EPA, but I instead recommended a man from Santa Barbara who was the second administrator of the EPA, and I just stayed out of that.

#### Lee DuBridge

Swent: Was there any trickle-down of all this here to the university?

Maslach: One thing that I can honestly say there was a direct trickle-down is in education, what you say when you talk in lectures, what you say when you talk to the people in the university and the Faculty Club and so on. Let me give you a very specific example. Later

on, Lee DuBridge, science advisor to president [Richard M.] Nixon, asked me to be on a committee, which was to review whether we should build an SST, supersonic transport. We came up with "No, it should not be built."

### Advisor on the Supersonic Transport; an Unworkable Airplane

Maslach: I wrote the section which dealt with the pollution of the atmosphere. I was working in the field of upper atmosphere aerodynamics, and I knew how few the molecules were up there. Just cleaning up the exhaust products on the big aircraft would be a real problem, and they were talking five hundred SSTs to be built. Of course, it never occurred, except for the Concorde, which was built by the British and the French, one of the great financial and ecological disasters of this world--truly an unworkable airplane. It had a history of just remarkable bad engineering.

The first nacelles did not fit the engines. The design of the plane--they could not extend the plane. It was all curvatures. You could not carry passengers' luggage during the summertime. They would ship them with another flight which was not supersonic, so the luggage would not come--or, if you took the luggage, you could not fly that many people. This is during the high-humidity months of the year.

The sonic boom problem, of course, limited how fast they could go, and where. It could go supersonic only over the open water. I see they're now talking about reviving the supersonic transport in United States for flights to Australia because you've got a very long flight, or flights to China, a very long flight. I hope we never do it because--

As an example, I was talking about this program at the chemistry table of the Faculty Club, and the then-dean of chemistry was Harold Johnston. I didn't know it, but he was the atmospheric chemist, and he worked in the very field that we're talking about. He said, "George, it's even worse than you think." I was just thinking of particles and molecules that were not going to react chemically. He said that the nitrogen oxides, which are called NOX, reacted as a catalyst and destroyed the ozone layer and made a hole, essentially. We have that hole down over the South Pole. The reason it's over the South Pole, of course, is because of the magnetic field of the earth.

So Harold Johnston--I said, "Gee, I want you to come back and tell these people." No one had ever mentioned this. I didn't know it. So I got him onto a committee that was involved in this pollution. He was the father of the study of this entire ozone layer business. He, one night, working all night in Washington, developed the equations and so on and presented them in a technical meeting. Last year, at the Nobel Prize awards, two members of the chemistry departments--one U.S. and one in Britain--received the Nobel Prize for what they had done more recently. Both of them, in their speeches, gave great credit to Johnston. As far as I'm concerned, he should have been a receiver of the Nobel Prize. They should have split it three ways. He's now retired.

Of course, with this as an example, I was able to use-- I used Charlie Tobias on the electric car and air pollution, because he was a world authority on batteries, and we all thought that batteries were the thing to do with electric cars. It still is, but battery development has been extremely slow.

I would use all kinds of people, right and left, and get them involved in these things, if it was part of their research activities. So yes, it did have a follow-up effect. And I had talked, of course, with students. I had students that finally ended up going to various agencies. So yes, there was a good, positive effect.

Bob Wiegel, who was an associate dean for a while, said it brilliantly many times: "All of the problems I get from my Ph.D. students I get from my outside consulting or visits to industry." And that was quite true. I have to admit the same thing. There are many, many of these problems you had never heard about or thought about until you actually sat down with other people in a crossing of disciplines and doing these things.

Incidentally, after I was on that committee on the SST and we voted that it should not be built, all hell broke loose. Nixon kept the report secret, and then he was challenged by a member of Congress, in a court case--this was an executive privilege argument. The report was issued after the vote was taken in the Senate on the SST. We had done a lot of campaigning with senators and explained why it should not be built, and we won by one vote. So the SST was never built.

Of course, we have all kinds of supersonic planes flying. The military has all kinds of supersonic planes that hold all kinds of world records for speed, so the supersonic transport was not a novel, new idea. But I would get phone calls all day long and in the middle of the night. This, of course, I was able to

handle because way back in the beginning of our troubles with FSM, this was the tactic students used. They would call up the chancellor's home--and calling deans. So I just asked Bell Telephone to have a plug instead of a hard-wired telephone, and the man said, "No, that instrument belongs to us." I said, "The minute you leave, I'm cutting that cable." I knew how to do it and put in a plug, a switch. He looked at me, and he put in the plug [laughs]. Now, of course, the phone belongs to you, which is what it should be.

#### Nomination as Director of the Environmental Protection Agency

Maslach: Getting back to the political thing, there were all kinds of developments. I'll pass quickly to one because I had mentioned the names. Lee DuBridge asked me to be the director of the EPA, and I kind of didn't say No hard enough or fast enough, and so he put my name up. I was approved by the Senate committee, etc., etc. And these posts carry a cabinet-level rating. These directors of these agencies are essentially at the same salary level as a cabinet member. So I was approved for everything. Then we received the word, in a strange way, that I had been turned down, and I had been turned down by Nixon. I was turned down because I was a Democrat. I said, "Fine, that's the end of that."

And then Lee DuBridge called Chancellor Heyns. Chancellor Heyns was on the National Science Foundation board, and he felt sure that DuBridge was calling him on NSF business. Just as the call came through, a rock came through the chancellor's office window. We were still having protests. These were kind of surreptitious, fly-by-night type protests. You couldn't spot who did it. But the chancellor's secretary said, "We were under the desk" [chuckles] when this phone call came through.

He answered the call and talked to DuBridge, and he was so angry. He told me later--he said, "I told DuBridge, 'I don't give a good goddamn what Maslach does.'" Basically, what DuBridge was calling for [chuckles] was to ask Heyns to ask me to take the position at a rate of pay lower than the cabinet rate, which would mean a salary cut for here, and with the added expenses in Washington--horrendous--and in that way we would avoid presidential signature on appointment. I said, "No way." And that was the end of that. So that's as close as I ever got to taking on a federal government job. It was fun, thinking and so on.



The Chancellor's Shadow Cabinet

Maslach: One of the exciting times, which is not Washington-related directly, occurred during my deanship. People are pretty knowledgeable of the FSM movement and the disruption it had on this campus. It terminated with the forced retirement of Ed Strong as chancellor and the appointment of what was called by the president of the Regents a shadow cabinet to help the acting chancellor run the campus.

What happened to me was one day in the afternoon, early afternoon, I received a telephone call from Ed Strong directly. That was sort of odd, but I took the call. He asked me if I could attend a meeting in Don McLaughlin's house that afternoon. I could come--I think it was three o'clock. I said, "Sure." I said, "What's it all about? Don McLaughlin's house. Why are you meeting there?" He told me that the Regents meeting, which had passed--

Swent: Don was a regent at that time.

Maslach: Yes. This was in November. A lot of the FSM things had been talked about, and they wanted to take some action in the December meeting. This was a personnel action, so you could hold a secret meeting without violating the Brown Act by the State of California.

The funny and sad part of it was that for years I had wanted to go to Yosemite Valley for the Christmas Bracebridge Dinner. That of course went back, years, to Ansel Adams. And he, of course, was the central figure in the Bracebridge Dinner skit that's put on. He played the role of the squire. All this is in costume, and it's in this beautiful dining room of the Ahwahnee Hotel. Getting a ticket to that was pretty tough, but I had two tickets for that Christmas.

Well, Regents meetings are around the third week of the month, and I at the beginning of December was going to this meeting at Don's house. I didn't realize that this would destroy our entire vacation, and I would have to cancel the tickets. It happened to be the year, incidentally, in which it was very difficult to get into Yosemite, even on the all-weather road, 120, because there was a flood in the park itself. The valley was half a lake. So the number of people who actually got to the Bracebridge Dinner through this storm was pretty small. And a number of people had to cancel for physical reasons.

Ed Strong told me that the "shadow cabinet" concept had come up in discussions and that he had agreed that he ought to have more people throughout the faculty that would be advising him. I kind of knew about this, and I knew who the people were. The people that were going to be at that meeting were Martin Meyerson, dean of the College of Environmental Design; Sandy Elberg, graduate dean; Frank Newman, dean of the School of Law; and I think there was one other person in there, who couldn't make it but came later. He was from Business Administration.

I got to the McLaughlin house, which I knew well, and I walked to the door--knocked--rang the bell, whatever. I walked in this little vestibule--it's a gracious house--large. To my left there was a step-down living room, and there was Clark Kerr and Harry Wellman and a bunch of officials from University Hall. And then, to my right, in the dining room was the Regents, in meeting.

I started walking in, not knowing which way to go [chuckles]. I thought, "Obviously, I should be going over here." And so Clark Kerr said, "Oh, no, no. You're not here." Don McLaughlin said, "No, not here either, George. You're in the library." I said, "Okay." So I walked straight ahead. There's a little library, just a beautiful little room--all paneled walls, with a wonderful view out over the bay--sort of a library-study.

I walk in, and there's Sandy Elberg sitting there. Sandy--you have to know him--always had this feeling of being overwrought and too many things happening. His favorite statement to me, when I would be teasing him, would be, "Oh, shush." [laughs] I walked into the room, and there he was.

"Oh, George, I'm so glad to see you."

I said, "What's happening?"

"I don't know; I was just told to come."

A few minutes later, Martin Meyerson comes in, and Frank Newman comes in, and we were kind of chatting. Frank said, "What are we here for?"

I said, "I talked to Ed Strong when he called me," and it turned out that all these other people went to the secretary, and the secretary said, "You're just supposed to be there." They knew nothing. The secretary would never ask Ed Strong.

So I told him that we were going to be the shadow cabinet and that "you, Martin," were going to be the executive--whatever --shadow-chancellor or whatever it was going to be. So we talked about it amongst ourselves very quickly. Newman was not quite sure it was such a great idea. You remember Frank Newman went on to be on the Supreme Court of the State of California. Martin Meyerson was quiet. And then Sandy just seemed to have no concept of what we would do.

I was just keeping an open mind and giving some "for-instances" on what this group might be asked to do. Well, this meeting of the Regents was really quite traumatic. We sat in that little room, but I learned afterwards some of the things that happened outside. Ed Strong and Clark Kerr, [...], [...] made their presentation to the meetings about this shadow cabinet. Of course, we were trotted out and introduced as the people. Then the Regents kind of broke up, and a lot of them left.

The chairman of the Board of Regents spoke to us as a group before we were introduced to the Regents, describing kind of what he thought we would do.

Swent: Who was the chairman at that time?

Maslach: I've got a block on his name, but he was the executive officer for the May Company, a major commercial organization throughout the West Coast states. He was a powerful regent and for many years was the chairman--very prominent, dominant figure. Anyway, he outlined things, and they were all rather innocuous. We were supposed to take jobs from Ed Strong and conduct surveys for him and also for the Regents. The Regents felt a vacuum of knowledge about this campus, and so a couple of regents were supposed to be sort of contact points with this shadow cabinet and the chancellor.

We nodded. After he spoke, why, then Clark Kerr came in and gave us a short description of what he thought. I always remember with great poignancy, because Clark Kerr was at the door of the library, and Ed Strong was right behind him. Clark said, "No, Ed, why don't you stay outside." He came and spoke to us directly. That little scene just was imprinted on my mind. I just knew at that point that Ed Strong was not going to be long in the chancellor's position. There was no mention of this anywhere.

We heard Clark Kerr speak, and then he asked me, as an individual, to go down to his office after this meeting and meet with him at his office.

So we started breaking up, and people were leaving right and left. I knew the house, and there was Don. I said, "Don, how about a drink?"

He said, "You know where it is." So I went in the kitchen, and there was the secretary to the Regents, a woman. She was opening and closing cabinets in the kitchen.

I said, "What are you looking for? The booze?"

She said, "Yes, I need a drink." [chuckles] So I found the liquor locker, and I put it up on the counter--bourbon and Scotch and whatever. I got the ice cubes, and then we stood there and had a drink in the dark kitchen. Don came in, turned on the lights, and he poured himself a drink [chuckles]. So it was kind of a meeting in the kitchen--the Regents and everybody. It was kind of an interesting way of sort of relaxing from this strenuous mental exercise we had gone through.

I said goodbye, and then I drove down to Clark Kerr's office. I, of course, had been there before, when I was appointed as dean. He tried to give me kind of a broader, more detailed understanding of what was happening. The reason that they wanted the people that they wanted, that they had there, was they felt the strength of the Berkeley campus and the stability of the Berkeley campus rested with the professional schools and colleges--Engineering, Law, Business Administration, Regional Design. To some degree, that was quite true. There was a little more activism in Law and Regional Design, but Engineering and Business Administration had pretty much been hands-off in a lot of this activity.

I asked, "Who recommended us?" He said he asked Ed. In fact, this was Ed's idea. I thought that was pretty good, and I began to feel a little better about the whole operation. But I still remember--it was about five--remember, it's December, and dusk comes pretty early. There were the two of us, sitting in his beautiful office, without the lights on, just chatting back and forth. I want to emphasize this is the same kind of closeness, you know, that I felt with so many different people. My memory of Ed Strong was sitting in his office, in a comfortable chair, talking with him--the same thing here with Clark Kerr.

My relations with Clark--at times, I disagreed with things he said and did, but in general we were both scholars of higher education--me to a much smaller degree than he--and when we met just six months to a year ago here on campus, why, we had such a

cordial time in talking to each other. Obviously, we liked to talk to each other about these various things.

Swent: When was this meeting?

Maslach: It was when Martin Meyerson became acting chancellor, when Strong was taken out of the position.

Swent: Right after that.

Maslach: The December meeting.

Swent: At that same meeting?

Maslach: No. The meeting of the Regents formally, in public, was held--

Swent: Followed this meeting at Don's house.

Maslach: --about two weeks later.

Swent: We'll get that date somewhere.

Maslach: Oh, I'm sure we can find it.

Swent: So this was just twilight in more than one way.

Maslach: Yes, really. Just sitting there, talking, and then I left. I remember him not congratulating me but saying warm things about the College of Engineering and how it was improving.

If I may just drop this for a moment, you have to constantly remember here that Ed Strong gave me three jobs to do: one, to have a true four-year curriculum, which occurred in 1966, when we went to the quarter system; to get more faculty involved in the Academic Senate, which steadily increased to the point where we have dominated the Academic Senate--chairs of all the committees, practically; and third, to make the University of California the best College of Engineering in the United States.

We were a distant second from the first year that I was dean and in the first review that was made of academic organizations.

##

Maslach: I just made some statements about the ratings in the College of Engineering. We were a close second five years after the first ratings, which were about 1964.

Swent: I think the Regents meeting we were speaking of must have been December '64.

Maslach: It might have been '65.

Swent: Meyerson came in January '65, according to my time line.

Maslach: Okay, then that's when it was. The point I want to finish with on the ratings is that years later, when Ernie Kuh was dean of the College of Engineering, why, the best review ever, which was done by the research councils of the federal government--both science and engineering councils were involved--Cal, UC Berkeley Engineering was rated number one. So the three things that I was charged to do by Ed Strong--two of them were 'pretty well finished in a few years, and the third one was finished in about six, seven--no, about eight years after I had taken the deanship and that charge.

Anyway, I left that evening and went back home and related all this to Doris. I talked about things, and suddenly, in the next week, I was getting all kinds of jobs--to do this and to do that--as part of the shadow cabinet. We operated out of the chancellor's office. A key contact man was Errol Mauchlan, who was the vice chancellor for financial affairs. He was--Budget and Planning, I believe was his title, vice chancellor. He became kind of a member of this shadow cabinet. It was quite nice because Frank Newman just never felt comfortable in this position, and so he resigned, and Kragen, Adrian Kragen, took his position. The man that couldn't make the meeting was the Business Administration--he came to later meetings.

We were charged to bring up a number of different things, including the famous--as I mentioned last time--"time, place, and manner" of holding protest meetings, and the use of the microphones at Sproul Plaza--things of this nature. We brought up a lot of things, pulling materials from the Academic Senate and also giving a philosophical note. It was interesting to see that these reports were presented to the Regents and incorporated in their minutes. Of course, this was done publicly, and these reports were labeled by the name of the regent who presented the report, but the report was our work. We never got the authorship straight on these reports, but we wrote them.

It was kind of nice to have a number of people writing these reports because if you think about it, Meyerson was a great speaker, orator. Of course, he wrote beautifully, too. Adrian Kragen, as an attorney, wrote in more flowery terms. I'm not a bad writer. And Sandy Elberg was excellent. Mauchlan has a very

British approach to his writing. So we had a lot of word artists working on these reports.

We did a number of things of that nature. We were advisory. But it started immediately. At one point, Doris and I made a decision we couldn't go to Bracebridge Dinner. We gave it up which I always regretted.

Swent: Too bad.

Maslach: Yes, it was too bad. But the Regents meeting in December was one of the stormiest meetings. I'm sure that in the confidential meeting of the Regents which was held, Ed Strong gave a statement--he had it prepared, in mimeograph form--and this statement to the Regents was his personal position. It revealed that he had a different viewpoint than the president, Clark Kerr, and so he objected to a number of things. But he made it a personal statement in a way that kind of demonstrated that he was not in control. His viewpoint of the chancellorship should have been his relationship to the president.

Swent: This is all in relation to the student protest.

Maslach: Yes, the movement. So at that point, I guess he either resigned or was asked to resign. As I said, a very emotional meeting. Somebody sent me a copy of that document--his words. I was so impressed negatively by it. I don't think I cried, but I must say tears came to my eyes because I could see the end of that tremendous career of a professor of philosophy who philosophically had a viewpoint, and here he was, in an administrative position where his philosophy really did not come to bear. And so you have to maybe submerge your philosophy on some of these things.

Swent: What was the specific--

Maslach: He thought he could have worked things out with the students if he did not have interference. I now want to give you a name that I had forgotten last time. The vice chancellor was Alex Sherriffs. He was a professor of psychology. He was vice chancellor for Strong. I think that he was painted as the grey eminence in this whole process. But all this occurs after the third week. Strong is out. Meyerson was appointed at that same meeting as an acting chancellor. Meyerson didn't know about the secret meeting. He was kind of the de facto chairman of our shadow cabinet.

This was great. I thought we could make some progress. I felt that a lot of people would rethink their whole role in this

protest movement, think more kindly of people such as Ed Strong. But--

Swent: What do you think should have been done differently?

Maslach: Well, it's hard to say. I talked to Mario Savio at length during these periods of time. I have great, great respect for the man. He was a true intellectual, a scholar, and he was anti-violence. Left the FSM when it became violent. I came and talked with him at the bar down on San Pablo Avenue, where he later was a bartender. He had his first child, with Goldberg, and the child had Down's syndrome. It was so sad to see him holding this child. Did not live very long. But it was a sad period there for Savio.

It was also a sad period for a lot of other people because the whole basic concept of the FSM was hard to argue with; and that is the right of free speech but on political matters. I mean, why can't a candidate for the president of the United States be on this campus to speak to people that were going to vote? So this whole use of the campus issue, which was the fundamental issue, was handled very badly by everybody--Strong, students, faculty, regents, Clark Kerr--everybody. There's enough blame on this whole period. Everybody walked away with a piece of the blame. I don't think that the FSM period was nearly as disruptive as later protests. They certainly did not have trashing of buildings and things like that.

One of the first things that happened to Meyerson, of course, when he became the chancellor, was the Filthy Speech Movement. He just tackled that one, head-on. He just stood up to people. He won, just decisively. Of course, that was seen by many people as the proper approach: the change of leadership and the removal of Strong was warranted.

Anyway, things went along. I always enjoyed that period because you would meet as a group and we would discuss many things--exchange opinions. At one point, I wrote something. I can't even remember now what it was on, but it was on some specific protest activity. Martin read it, and he said, "Oh, this is wonderful, George." Martin and I were very close, incidentally. I believe I already told you that at our first meeting of the Dean's Coordinating Council, with the chancellor, why, he and I sat down next to each other by accident. From then on, we were close.

He said, "Do you mind if I add my name to this?" It was a memo, essentially.



I said, "No. Why don't we just send it as a part of the cabinet meeting?"

He said, "No, no." So he used it [chuckles]. It later was called in his name, his position. It was something I wrote, the entire thing, every sentence and word. But this is the way we worked. There was no pride in authorship. As I was saying, Mauchlan worked very closely with us. He served as the prime contributor to many of the position papers that we were asked to make.

The shadow cabinet actually started to lose its influence as Meyerson took over. He had a very good council of deans and so on, and he conducted the campus pretty much the same as Strong had. He had a different vice chancellor. One of the vice chancellors he had was a professor of metallurgy, Alan Searcy. But he was out there on the firing line, out there on Sproul Plaza day after day, arguing with protestors. Alan Searcy. He was a friend of mine. It was just good to see this kind of new attack.

A prominent name in that whole FSM period was John Searle, also professor of philosophy, with Ed Strong. His piece, which was written up and published in *The New York Times Magazine* section, was truly a wonderful historical statement as to what had happened and why it had happened and the sacred cause which, of course, was free speech. It traced the dynamics of the protest and what finally erupts is when the police come in--or the "blue meanies," as they were called, in the sheriff's department, in the FSM. They used to meet underground in the parking structure under the tennis court and had their blue overalls and batons and helmets. John was the scholar of the period. He stated it in such a clear fashion. From then on, any other university should have used his article as their blueprint to avoid conflicts.

Swent: I'm not quite clear how the shadow cabinet differed from just a council.

Maslach: It was a selected council. It was just four or five of us, you know? We would meet and talk across a little table.

Swent: More of an executive committee?

Maslach: Yes, it's more like an executive committee. We've got this big Dean's Council and the Chancellor's Advisory Committee thing. It was a real strange operation. Think about it. Here, you've got the dean of the College of Letters and Science, who is responsible for 60 percent of the students on campus; and then

there's the College of Engineering, about 13, 14 percent of the campus; and then the Business Administration and Law, lesser percentages; and then there's a half a dozen small schools, like Librarianship, Criminology, and so on. They were like one percent. So you've got about a dozen people there who really have such a minor role on the campus on major campus issues.

And then the chancellor always had the business officers--head of accounting, head of purchasing, and so on--down at the end of the table there. They just really didn't care much about what we were talking about. They were a noisy influence and more than once had to be told to shut up. But it's a very good exercise to think this through. I did, myself. I'm much more of a small-group person than a large-group person.

Heyns, who came on as chancellor, was a large-group person. He had that Coordinating Council, of large size. But when Bowker became chancellor--I was provost with Bowker--he told me directly--he said, "I can only work with about seven people directly." So he had a cabinet essentially of about seven people. I'll get into that at the next session.

But it's an organizational strategy: how you work and how you work best. The small group just got things done. I mean, we would write a position paper, and I'm not joking, we would start, say, the middle of the afternoon, and we would all go our ways, and we would all have our sections to write, and the next day we had it all done, and we went in. Mauchlan or the others would do the editing, and the work would be out, in two days. Everything was finished. You can't do that with thirty people. So it's an organizational strategy more than anything else.

The times were sad for me because I really valued my meetings with Ed Strong, in which we would sit down--we were both pipe smokers--and talk over different things. I felt that Ed had really done me a lot of favors in terms of the budgetary process --Engineering--building up.

We went through a period with Martin Meyerson, who was acting chancellor. I was involved almost daily with something. This is while you're dean of engineering and while you're very active in Washington, D.C. I was just working sixty, eighty hours a week. And I am not joking. I used to keep a log of my hours, especially on days when I was traveling. I never did any of my lecture preparation in the office. I always did that at home. Gee, I was now doing all kinds of night meetings.

The Third World Movement; Activism Becomes Violent

Maslach: One night meeting I had down in the Faculty Club was during the next protest; namely, the Third World Movement protest. I had been down there at some kind of a meeting. It was the Alumni Society, the Engineering Alumni Society, which we used to hold there. I didn't have the car, my wife was using our one car, so I started walking up the hill, which is what I usually did. I walked down and walked up. It was good exercise. I like to walk.

So I walked up the hill, and somebody out near the garages behind the Faculty Club yelled at me, and I looked and saw this fellow in a mackinaw with green and black plaid, north woods type jacket. He had a regular hat on, a fedora, and dark pants. He yelled and wanted me to come. I just waved. I was late getting home, and I was walking fast, which I do, because I'm six foot four. And I walked away.

The next morning, the headlines in the *Chronicle*--there was a murder on the campus, right there at the garages of the Faculty Club.

Swent: Oh, my.

Maslach: So I called up the chief of police. I said, "I think I've got some news for you." I told him what I saw, whom I saw. I described the man--stocky, moustache, I'd say in the thirties--not young, not a student. He just looked at me after I gave all this information to him and to the lieutenant there who was on the case. He said, "George, promise me if you ever need a ride home, call me. We will drive you home." He said, "You could have been murdered."

Swent: Oh, my.

Maslach: It was true. They never found the guy. It's an unsolved mystery. He killed a graduate student, as I recall. It was a sad, sad feature.

You know, there was amazing change in the campus. Don McLaughlin and I sat down one time at his house. We were just chatting over a drink. He said, "You know, George, everything is going to change." He said, "We're going to have a different university." I couldn't understand his reasoning, but he was speaking from wisdom, rather than from logical progression. He just predicted all kinds of things, including People's Park type

activities and protests. He just said, "We will be getting the wrong kind of student here."

I argued with him back and forth, but in many respects he was right because what happened was that there was now a change. I think this was a change in our total society, but it certainly was obvious here on the campus. We had more violence as time went on. The FSM was not violent. But the Third World Movement, we had trashing of buildings, we had murder of a woman student in the library--you couldn't believe it was happening. You would just stand there and look.

I walked out of the Faculty Club one day. My car was parked up there between the Faculty Club and Birge Hall, and I walked out, and all of a sudden I could not believe what I'm seeing. Every car--maybe eight or ten cars, parked--every windshield was smashed, including mine. I looked. What the hell is going on here? There were some students. I said, "What's happening?" One student pointed up the street, and there was this man walking with a pack over his shoulder, and he said, "The guy had a bicycle chain wrapped around his fists, a steel chain, and he just came and smashed every one. His fist is all bloody." He smashed every car.

I said, "Let's get to the police." These kids were so perfectly organized. They had already sent two people down to the police department; they had two people kind of following this guy, closely [chuckles]; and they left half a dozen people there to tell people who might come up what was happening, to beware, to stay away from that guy.

Well, I later found out he was a discharged military man. He came out of a mental institution in the military, and he had been judged ready to live in society. As the police chief said, he had a roll of bills on him that would choke a horse. He had all kinds of money. He was sleeping up in the hills, and he was violent. I said, "What can you do with a guy like that?"

He said, "It's standard police technique. You buy him a one-way ticket on the train and put him off. Ship him off to somewhere else."

Well, that was almost a perfect analogy of what happened here at Berkeley. People all over the world were sending activists to us. We were the lodestone of the activists' higher education movement. I eventually had these people from New York. First Princeton with a three-piece suit. And we had all kinds of people coming into the activist movement. Even today, if you wanted to take the chance, go down to People's Park and find out

where did he come from, where do you come from? It's amazing. It's not a home-grown protest movement. It's an international protest movement.

So we're still getting the activist types, but it's a whole new generation. All of the people who were activists then have either died off or they moved into jobs like stock brokers and bankers and so on, [chuckles] and they have. This is not just a joke. They have become part of the system of operation. Savio became a professor in the state college system.

These are troubled days for me and us. It climaxed in the Third World Movement because the activists had a protest which is not mentioned very often these days. One morning--very well planned--every major entrance to the university was blocked off by hooligans. They were rough and tough, physical. Up here, where the Anthropology building is--Law School--that area, Sproul Plaza area--every main entrance was blocked. And it was blocked for a short period of time.

Now, what happened was that in Engineering people come and park maybe in the structure down below there, on Hearst Avenue. Or they come through the public transport station. The drop-off is Hearst and Euclid. We had a young woman, Filipino background, married to an architect, lived in San Francisco--the two of them were doing very well. She was working for us in the dean's office. She was truly a beautiful young woman--tall, very quiet, and very, very competent. She did an awful lot of typing because she was so good at it. She was excellent in maintaining the files. She really was the person who kept our records straight.

She got off the bus, just at the time of the blockage of the gates. She was beaten as she tried to get to the campus, she was actually struck by these pickets. Fell. She hit her skull on the curb. Within a day, she died.

Swent: Oh, my.

Maslach: I doubt if that was ever in a news article. I looked. They mentioned the violence, that people were beaten, but that woman died. Our office--we just couldn't believe what was happening.

Swent: What was her name?

Maslach: I don't recall her name. I probably have moved it out of my mind purposely.

Swent: What a terrible--

Maslach: Truly, she was just a wonderful, wonderful person. Forget everything else. She was gracious, gifted--just everything positive. And here, the irony, the Third World--she's a member of the Third World! And the whole protest came out in the newspapers from them that they wanted to prevent--what they did was to block--especially Third World people from coming onto the campus. Try to figure the logic of all this.

Swent: No.

Maslach: Cannot believe it. It was so bad. Of course, this was the time when the favorite thing was to call in a bomb threat to a building and have the building evacuated. That happened over at Wheeler Hall quite often. We got it under control after time, but it was that destruction. There were classrooms in which a delegation of activists would walk in, chanting. Not over in Engineering. If it happened in Engineering, the students and the faculty over there would have been very physical, so therefore it was a good idea that we always attacked that kind of activist movement outside of the campus.

It was, to me, a miserable time of the protest period. The years of our troubles, I always used to call it, thinking of the Irish problems in 1916.

Swent: How old were your children at this time?

Maslach: I became dean in '63. Our youngest was thirteen, the second was fifteen, and the third one was seventeen.

Swent: So they had ideas about this, too.

Maslach: Well, Christina was on her way to Radcliffe. I used to drop in and see her whenever I was back at MIT on the visiting committees or something like that. I was there after Kennedy was killed. I was the lone man in that dormitory. Father figure. All the girls sat in Christina's room. Most of the students had left to go home. They lived nearby. Just walked away. I would say 80 percent of the students at Radcliffe and Harvard just weren't there. I stayed there until one or two in the morning and counselled these people--just had a wonderful time with all these wonderful people. They were having a rough time with Kennedy's assassination. It was a tough time. It was such a spiritual, emotional thing for them. I might not have reminded them of their father, but it was [...].

Swent: That was a little before this--

Maslach: Oh, yes. But Christina, I was saying, was in that position of her life. So '63, '4--she was gone. And then a year later, '65, Jamie went to Harvard. The one that got hit the most by all of these things was Steve. He was thirteen when I became dean. He started at Berkeley High, and four years later--so he went through the whole thing.

I always remember him educating us in a number of things. For example, they tell me it's more difficult to get cigarettes at Berkeley than it is to get drugs. Marijuana you could buy anywhere, right on the street. Also, he educated us on the Beatles [chuckles]. "Don't listen to the music; listen to the lyrics. Read the lyrics. They're saying something." And it's true. The Beatles did have an awful lot of stuff that they--they were trying to say. So he kept us up to times with not the protest movement but the drug movement--which he did not get into. I'm sure he had minor touches, but he was not a druggie, and he was not into any violence.

He was on the football team at Lick-Wilmerding. [Looking through papers] I was looking at this article.

##

Swent: This is a *Look* magazine from--what's the date on that?

Maslach: February '65.

Swent: And the article is called "Jet-Age Professors. Campus Revolt." A full-page picture of George Maslach in the dining room. "Jet-Age Professors."

Maslach: He was down at the heliport at Berkeley with other professors.

Swent: Yes, they had a helicopter port there then, didn't they? "The gathering conflict disrupts the dream life of America's new elite."

Maslach: [laughs] It's actually a very good article. It was written by one of the editors who went on to do quite a few very good things. It was right in that period, '65, February '65.

Swent: There's a real disconnect there, isn't there, between--

Maslach: Well, I told you privately maybe, but I'll say it here for the tape. Heyns, when he became chancellor, once told me you could always tell when there was something going to happen on the campus because I was taking off for Washington, D.C., Friday

afternoon. This was quite true. I must say I often would watch the news, the eleven o'clock news in Washington, and there's Sproul Plaza. These were times when some very strange decisions were being made.

In the words of Mario Savio, which I quote often, "The movement will be dead unless the university commits another atrocity." A typical atrocity was that the Regents voted to punish the ringleaders of the FSM. Well, the ringleaders were not just students. They were people from all over. Who were the ringleaders? How were you going to do this? That just sparked a new revolution. That became the sacred cause.

You have to remember that at some point close to all of this Clark Kerr was fired by the Regents. As he said, he was "fired with enthusiasm." He invited me to his house for a large dinner meeting--the president of Cornell University was there, who happened to be a good friend of mine. So I came, for other reasons, as well. Clark had a discussion about the university: where it was going. I'm sure the presidents of universities are on the phone talking to each other, learning from the last experience.

It was kind of a Last Supper, so to speak, allegorical--not that there was anybody in that room that was going to betray him, but there was a Regent, a governor, who was going to fire him. He admitted at that dinner--and it was just before the Regents meeting when he was fired--that he had premonitions that this was the end. He had had enough of Reagan at previous meetings. So he was another victim, basically, of the whole uprising. Very sad for not him alone but for the university and the state.

You have to go back and see what he did. We went from a two-campus university to a nine-campus university under his leadership. He was a principal in the development of the Master Plan of the State of California for Higher Education. I can argue with him--I have won a couple of arguments with him--that it was a mistaken assumption that one person can fix things. The demographics is what drove much of this. It turned out--and he has admitted since--that the demographics were wrong, and the population increase was driving the development of new campuses--the new campuses were developed.

Santa Cruz, Santa Barbara, Riverside. They didn't develop them to become monster campuses like Berkeley, Los Angeles. So we never really had the need for those campuses at that moment. We have the need today, and we are not allowing students to come to the university, even though we have the agreement that we're supposed to take from the top 15--maybe now the top 10 percent.



We need a new campus, right today. It should be in the valley. We already have the place located, the physical location of this.

What's happening now is ridiculous. This has been held back by the last administration in Sacramento. Whether the Regents are going to take action is going to be very interesting to see. But if I were in Clark Kerr's position, I would now sit in that beautiful home of his, looking out over the bay, as though I were on Mt. Olympus, and dream of what the plans were. In many respects, Clark was ahead of his time. That's one of the things you could say about him.

There's a great sadness to that whole period. To put things in perspective, from a dean's standpoint, we were building up our undergraduate enrollment by my going out and recruiting. But the normal process was to move into graduate activity as a larger part of our role. We went from a few hundred graduate students to well over a thousand. From a budgetary formula standpoint, we were growing in a way that was really quite dramatic.

When I became dean, we were not meeting our formula in terms of number of student credit hours, etc., for a faculty member. You have to remember, when I left the deanship, we didn't have to recruit. We were not allowing thousands of students to come in because we were already filled up. So in that period that I was dean, we went from drought to a flood. Today it's astounding me to listen to the numbers of students with a 4.0, and all entering students on the professional level in Berkeley Engineering have a 4.0 or better--whatever that means. It's amazing.

The reason it's 4.0 or better is that they give points for advanced placement.

Swent: I've always wondered how it could be better than 4.0.

Maslach: Well, this point system is ridiculous. It was grade inflation. I learned more--and I'll speak to this more--when I get into the provostship period. But at the same time all this was happening, there was a constant problem of recruiting faculty and meeting faculty, helping--doing everything I could to raise the quality of the faculty and renew our older faculty. The previous faculty was heavy with practitioners, people with industrial and governmental and other experience. But the scholars, the Ph.D. program is now essentially the main area of input and output in this college--the research complement, which is required of us, as stated in the constitution of the State of California.

Here we are--everything is changing. The campus is changing. The movements are changing. The protests are

changing. We've got the problems of getting more minority students. We're changing the whole curriculum from the old kind of a curriculum to a master's and Ph.D. curriculum.

Swent: We haven't talked about the change in--the whole area of grants and funding grants and those kinds of things, which we're going to have to get into at some point.

Maslach: Well, I think that this is kind of national and international question. We were beneficiaries--we were right at the crest of the wave. First of all, I received increased funding. But this was part also of my going to Washington, D.C. For example, the Civil Engineering building was built in large part because we got a million dollars from the federal government for that building. I was not the main person involved in dealing with it, but I worked with them.

I wrote a proposal for my aerodynamic-heat transfer-fluid mechanics people to have funding for research for the entire department, an umbrella research program. In those days, we had about thirty thousand each for about ten people, a three hundred thousand dollar a year program, so I was pushing that.

We, of course, had the problem of supporting graduate students. We could have TA-ships. We had RA-ships which came from the federal government.

Swent: TA is a teaching assistant. What's an RA?

Maslach: Research assistant. Then, of course, we developed scholarships. I started, while I was dean of engineering, raising money. I was fortuitous, really, in this. I learned from other people, and I was able to raise individual endowments from people who died or wanted to make a memorial gift. But I did not work on fund raising until I became provost, and that's another story, which I'll get to.

But we were building up our faculty. I remember when, before I was dean, one-third of our faculty was really involved in research. That was when I was head of the research committee for the Berkeley campus, so I knew where money was going. Today, 100 percent are involved with research. When I left the deanship in '72, I would imagine it was up to about 80 percent at that point because of all of the new people.

Using Chang Tien, since he's known, as an example--to give a little personal input of how my day was taken up--Chang went to Princeton University for his Ph.D., and my first knowledge of him was when he was proposed for a position in heat transfer,

mechanical engineering--my department. The chairman of the search committee was Ed Laitone. Chang Tien's professor at Princeton was Bob Drake, who was the professor of heat transfer here at Berkeley and who left for a variety of reasons. He went first to Kentucky, I believe, and then he went to Princeton.

Here was this young Chinese scholar, obviously very good. Came with extremely good recommendations from people--Drake, of course. One morning, Bob calls me. Sure, I'll talk to Bob. He gave me sort of instructions on how to care and feed Chang Tien. He just pointed out that Chang had not the best of English accents--British, that is--but he was learning, was getting better, and you really have to protect him in this regard.

The reason Bob mentioned that, by the way, is that we had once tried to hire a German professor who was one of the German scientists in the Hitler program but was apolitical, and came with a bunch of German professors here to California--actually, not to California, to the United States. We should have hired him. We tried to, but a group of older faculty in Engineering protested. They had a variety of biases, but one of the main things they pointed out was his language. "He speaks with this heavy German accent; the students won't be able to understand him." They're talking freshman students; they're not talking graduate students.

This man was not supported by the department. Bob Drake just felt very, very strongly that this man was a top scientist-scholar. The man went to Minnesota, a big one--and established a heat transfer research program that was number one in the world. Just overnight. He was there for many years. So it was our mistake. I think Bob probably left Berkeley because of this stupidity.

Chang came in, and I was told, "Help him." When I met with Chang, one of the things that I told him was--you know, I recommended to many of my young faculty, who were not good lecturers or public speakers, to enroll in Toastmasters, a private organization, free, and learn how to develop your public speaking ability. And he did. I remember Rick Sherman, one of the ones I recommended. He did, and he's excellent as a speaker. I like to think that maybe my helping Chang a little bit by just fatherly advice in this regard--

We were trying desperately to build up our minority enrollment and our women enrollment. I, about '64, wrote a book, a brochure I'll call it. It's called "Why Berkeley?" I'm sure there are copies up in Engineering. It's a light blue, eight-by-ten thing with beautiful pictures taken by a university

photographer. I can't remember his last name, but Dennis [Galloway] was his first name. I used to call him Dennis the Menace. Photos of Engineering laboratories, lectures, the campus environment, everything. I was making the pitch why to come to Berkeley. This was early in the sixties.

It helped us enormously in our program, especially at the community college level, but it was used also--it was pitched not just for transfers but also for freshmen, so we sent it out to hundreds of--probably thousands of high schools. People always remembered it because I used endowment money, and I spent a lot of time on it. I remember I got an editor and paid him as a consultant. The editor was in the Radiation Laboratory program. They got a big production program up there. He did a fine job of editing it.

### Recruiting Minority Students

Maslach: I started in on recruitments primarily in minorities. I was giving scholarships. There was a program that is still in progress today, which is MESA: math, engineering, science--I must admit I forgot what the A stands for. But it was a program-- [Bill Summerton], professor in petroleum engineering, was the man who should get total credit for this program. He had started it before I became dean, really. He went out recruiting, basically. I've forgotten how he got money. I helped him at times, but he would go to high schools, and he would identify--

I know one technique he used was to follow up on National Science Foundation scholars at the high school level. When he saw one that was a science or math or engineering, why, he would put the pressure on them to come to Berkeley. By personal intervention. He just made this a life career. He did it so easily, so nicely. He's such a soft-spoken person. And yet he was probably the best minority recruiter the University of California ever had. That program is a legacy, his.

I remember his coming and saying to me, "George, I could use a little money. We've got this black student, and he's having problems." I would talk with the black student. He was a National Science Foundation finalist, junior year, fantastic grades. But in the senior year, the grades were going to pot. Why? Peer pressure. Other black students were pressuring him to knock it off. I didn't learn until later on that the whole secret for many of these people was to leave the ghetto. Basically, that's what he did.

I recruited students all over, with Bill Summerton.

Swent: What about women?

Maslach: I want to finish with the blacks because it is kind of an interesting story. I was quite successful. I remember at a community college, a black came to the car and was sitting there and talking to me. He was so excited. I gave him my card, and we met down on the campus. He turned out very well.

I was following their grades, and I would meet with them, as individuals. I finally figured out they needed kind of a home. They needed a room, a meeting room. They needed to set up kind of a fraternity here. So I had a room up there in the Naval Architecture building, and I turned it over to them. That was great. But then I figured they needed some tutoring--

Swent: This was just for the minority students.

Maslach: Just for that group. I tried the Tau Beta Pi society, and they worked on it. But it didn't work as well as you would expect. Basically, any minority or any group would rather talk to their peers or be told by their peers what to do. And so through the Engineering Alumni Society--all these threads in my office here [chuckles]. I found a chief engineer of a plant out there in Antioch. I had him coming in, doing tutoring.

Swent: Was he black?

Maslach: Yes, he was black.

Swent: An alumnus?

Maslach: Alumnus.

Swent: I see. You didn't have very many.

Maslach: No, not very many. Very, very few. But then I would go to other organizations and say, "Do you have some people who are engineers who are black who would help?" PG&E--I found a wonderful guy. He was not one of our alumni, but he thought this was great. And so I started building up this tutorial program, and it worked. We got [??], I remember. He was very good. In fact, his wife was one of our stenographers in the mechanical engineering office. A wonderful couple.

I was able to find out first-hand that you had to have a critical mass. You had to have enough people with enough continuity so that you get this feedback. They were a group on

their own, on their own two feet. We didn't have it when we had only five or six. I figured out that we needed to get up there into percentages. There were three thousand students now, and what we needed was more like thirty to sixty. I kept working on it. We got there. I didn't maybe get it in my time, but the recruiting went on. Karl Pister did a magnificent job of recruiting. He dedicated himself to this.

In the women's recruiting, I wrote a brochure. I did about four brochures, incidentally. The last one was for women. I spoke to the few women we had, and I was taken on a tour. One of the reasons we didn't have women [was] we didn't have women's rest rooms in Engineering, and it was true. I worked on that--got that changed so that we had rest rooms for women students. Really, it was a major job.

I wrote this brochure. As I said, it was the last thing. By that time, I had a writer, Vivian Auslander, wife of a professor in mechanical engineering. She had been a professional writer-editor-producer of materials such as this. She was just wonderful. The women's recruitment program turned out to be very successful. On a one-on-one kind of interviewing. In other words, we interviewed these women that we had as students, asking why they came, what the problems were, etc. And we made it a very personal thing, talking to these women students. I think it was a very successful book.

Unfortunately, I left the deanship just as it came out. I don't have any knowledge, any anecdotes. But when I was dean, we had about one-tenth of one percent women. When I left the deanship, we had one percent women. That's a ten-to-one rise, and it was critical because it went from three to thirty. So we had our critical mass. Women were now expected to be seen. Since then, it has risen until, I think, that, oh, Karl had it up to around 10 percent, 12 percent. So he had a factor of ten.

This has grown up in large part also because there are many new features of engineering where women can work without having to get out in the field and wear boots and a hard hat. Computers, for example--computer software is just a natural for women. We have many women faculty now. And they're top people. That's all there is to it.

It was a tough, tough job. It was just like pulling teeth, it seems, to talk people into coming to the university and then to join the faculty, to go on for an advanced degree. It was quite a time. As I said, there were so many shifting bases because the university was changing, the multiple-campus university was changing---everything was going on, in a wild way.

Nobody had control of any one thing. I'm sure Clark and other presidents would admit that things were happening they didn't even know about.

It was just going on. There was a revolution, really, of our total society. This article, to get back to it--they called me, and the original intent of Look magazine was to write articles about people like me, because at that time I was getting to be rather widely known. There were such things as jet-age professors. These were people who did consulting and [were] constantly in the air. I was a good example [chuckles]. I was spending an awful lot of time in the program, much of it university-related, fund raising, but also much of it which was consulting of a nature which I thought was public service.

#### Look Magazine Features the Jet-Age Professor

Maslach: See, teaching, research, and public service are the three things we're supposed to be involved in. Public service is usually on the end and rather minor, but for some people it gets to be a big thing. So they sent out this team. I agreed to do it. George Pimentel and I were the two they chose. George Pimentel here [showing article]--just a fabulous person, just outstanding. A professor of chemistry. Went on to National Science Foundation work in Washington, D.C. And an outstanding athlete.

Here he is, shown in the picture, playing football with his graduate students. I mean, he was a better athlete than almost any graduate student. He was a state racquetball champion, Class B, which is kind of a gifted amateur type. He was really a great man and a great chemist. His work at National Science and NASA, studying the atmosphere of Mars and Venus, was just outstanding. He was much more the scholar, and I'm much more the practitioner.

Anyway, Look sent this guy out. He was the editor. He would talk with me at length. The whole technique was they would follow me around. I had these two guys, the photographer and this editor, who were just living in my hip pocket. They were in my office, and I would take them over to meetings every once in a while, take them to the Faculty Club for luncheons and talk with --just everything you could think of--take them home, with their lunches and dinners and so on.

The photographer spent about ten days with me. The editor spent, oh, about three days. While he was here, the editor, he walked over to Sproul Plaza. Of course, this was '65, February.

Sixty-four had gone through, so we had the demonstrations which had started, really, with the Republican Convention in San Francisco--November of '63. He spotted the faculty revolt thing as a major article--

Swent: Campus revolt.

Maslach: Yes, campus revolt, as a major headline thing. So when they went back, they ran this article, but they added onto it. You'll see [demonstrating]--here we have Mario Savio and Clark Kerr. It just got added onto it. I don't know how long it goes on, but if you read the whole thing, I'm sure you'll enjoy it. It changed everything. See, this is a whole new article. And they came out later, with a team. About two weeks later, they came out with a team of six or eight people, and they did a big issue on the campus revolt. I was not in that one. I was in this one only [chuckles].

That was interesting, to have the guy living with me. He would take rolls and rolls of pictures, this photographer, and each picture here was from a roll. They looked at a roll, and then they would take the best, and then they would take all the rest of the 35--

##

Maslach: It was interesting. I had this fellow, the photographer, living with me, practically. Actually, he lived at a hotel nearby, Durant Hotel, or maybe even the Faculty Club--I've forgotten. But he would be constantly shooting pictures. I got used to it. He actually went with me on a trip to Washington. He took pictures on the plane and pictures in Washington, the Department of Commerce meeting, so I had him in there at the Department of Commerce meeting, Technical Advisory Board. At the end, he gave me about a hundred eight-by-tens. Somewhere in my house-- somewhere--

Swent: Well, we'll have pictures to go with the oral history, then.

Maslach: Well, I don't know if they're very useful, but anyway, they're wonderful pictures. It was sort of a present to me then. But he's the one that told me they just take one picture per roll. I said, "My, God, that's expensive." He said, "Film. That's the cheapest part of the whole thing." I agree; it is the cheapest part. But he said, "You ought to see *Life* magazine. They take one picture out of ten rolls." He said, "They're just constantly taking." As a photographer, I know what that means. What they're doing is they're looking for the moment, the picture of



the moment, to capture that. You don't plan that. You don't pose that. You don't pose any of these things.

This [showing picture] is in my dining room. The background is that, as you see, [there's housing next door?]. But he was a very fine photographer, excellent photographer. So it was a wonderful period to remember.

### Working out a Pact with The College of Letters and Science

Maslach: Getting back onto the campus situation, we--in engineering there, as I've proven, I think, to you--were a much larger part of the campus representation--not only the administration but of the Academic Senate. One of the things that I claim that I did was to change the attitude of the Senate, the attitude of a lot of faculty members--so-called friends of mine--who used to relate to Engineering and talk about it as a trade school. Well, it's no longer called a trade school by anybody. Hasn't been for many years.

I used to have to go through that and in the faculty meetings a lot of people would kind of edge their words and harden their tones, but it wasn't until we could really prove that we were doing things nationwide, internationally, that were enormously valuable. What I learned during this whole point in time was that I had to go out and tell people what Engineering was, what we were teaching.

Swent: It was L & S that had run the show prior to that.

Maslach: Yes. Let me give you just one example which I changed within the university. After a couple of years, I noticed that we were having difficulty with L & S. We had a number of courses that were social-humanistic that students would take. They were taking these courses and going on. They were supposed to take--our rules in Engineering--the advanced courses as well. You weren't supposed to just take Mickey Mouse introductory courses. I went over there one time because I noticed there was in the catalog a list called an "S List" of courses within L & S that could be taken for credit by students such as engineers, outside of the College of Letters & Science.

I found out, to my horror, that students at L & S could not take, for credit, courses in engineering. If you believe in the university concept--the search for truth and so on--we had a caste system, and this was in the sixties. I didn't learn about

this until '64 or '65. I just went over there. Walter Knight was the dean of L & S. I just said, "Walter, this is ridiculous. This has got to stop. I'm going to take this to the Academic Senate." He understood me--we were friends--so we kind of worked out a number of things, sort of a pact, agreement.

We were in a situation of being sort of a colony of L & S. We took our math, our physics, our other courses there, but they wouldn't take any of our courses. It was a one-way trade. I said, "Look, I'll tell you exactly what I'm going to do if you don't change things. I'm going to have professors teaching our students mathematics and so on." And we could do that. He understood.

The student credit hours of physics was getting--from our students--supports half of the physics program. Chemistry, the same thing. They gave an undergraduate Chem 1-A course in which the lectures are given in an auditorium which seats 800. Just think of the student credit hours that that lecturer is making for the college in chemistry by that lecture. Sure, they have sections where they break down into smaller groups, but this tyranny within the university I had to attack.

I was very successful and we did it very quietly. Now, for example, computer science courses--everybody now comes over from L & S to take those courses.

Swent: That was one of the big--

Maslach: I did that when I was provost, but I actually got started in it when I was dean because we changed the name of Electrical Engineering to Electrical Engineering and Computer Sciences. Lotfi Zadeh was the brains behind that. We suddenly were getting the kind of respect from the rest of the university that we didn't have before.

Swent: As I understand it, that was sort of a critical thing, wasn't it? Computers were new, and where to put the computer science--

Maslach: Well, it was up in the air until I became provost. L & S started a Department of Computer Sciences, in competition with us in Electrical Engineering and Computer Sciences, and that caused a lot of confusion to people outside as to which was the right computer science department for them. It's now really quite small compared to the Computer Sciences and Electrical Engineering combination. But that's a good example.

### More Engineers Receive the University Medal

Maslach: The other things that I would publicize is more engineers have received the University Medal as scholars than any other area of the campus--overwhelmingly, overwhelmingly. Just sort of a little story: I want to be sure that engineers would be put up for various honors and awards, so I was talking at lunch one time to a faculty member in Engineering, and I said, "I have a wonderful student by the name of Henry Lurie." He was in my junior class, and he was so good, so outstanding--always right. I'd have great trouble with him because he'd always have his hand up.

This is a problem. When you're teaching, you've got the top students, you've got the bottom students, you've got the middle students--the largest group--and you really have to talk to all three groups or you just leave one group behind. Lurie's hand was up constantly. And he sat in the front row, incidentally. I said, "Henry Lurie has got a hell of a good record. Why don't you look him up?" About a week later, a faculty member sees me in the Faculty Club and, "Oh, Henry Lurie is just barely staying in school."

I said, "That's impossible."

It turns out--I checked. Henry Lurie in Engineering was a straight-A student. Henry Lurie in English was, like, a C student. And so they looked up the wrong student. Then I went back to the faculty member and said, "You've got it all wrong." And Lurie became the University Medalist that year--only through my intervention, through the back door, sort of.

Swent: Were there two--

Maslach: There were two Henry Luries.

Swent: Two separate students.

Maslach: One in English and one in Engineering. Obviously, someone was looking it up, and ENG is Engineering and ENG is English, and so they just got the wrong Henry Lurie. But I was constantly pushing on this thing. I was constantly trying to help the students with the EJC and the Cal Engineer. I told you about that, alumni society. I still get the Cal Engineer free because I'm a member of the Alumni Society. Cal Engineer went on to win many awards for its publication.

Difficult Decanal Decisions Which Could Not Be Delegated

Maslach: But these things kind of meshed. There were many critical areas that you had to pay attention to, the Alumni Society being one. Then, of course, the day-to-day work--I don't know if I've told you this problem--the worst day of every semester was when I had to review the records of the students that could be or should be dismissed. Have I gone over this with you?

Swent: You mentioned the stack of reports.

Maslach: Oh, yes. I had to go through that stack of reports--Vi Lane had everything in perfect order. I essentially went through it. No other dean had ever done this. I would spend the entire day looking over every file of every student who was subject to dismissal. This was, of course, one of the great powers that a dean has. You don't know these things. They never told you. You learn about them the hard way.

For example, the dean has the non-delegatable power to keep a student in residence--in other words, waive the dismissal--and no other person on this campus has that power. The chancellor doesn't have it, the dean does. It's a decanal duty with the program. The dean of L & S has that. I had it in Engineering when I was the dean of Engineering. So I felt very strongly I couldn't delegate this so I had to do it. I would spend that day--it was so traumatic that every evening I'd go home and have a double shot of whatever I was drinking. I just couldn't do anything. I was just so jumpy. I couldn't read. I was thinking over every one of those decisions. Horrible.

Some of them were just really bad for me, I must say. I worked on it, but also it brought me into contact with students. One was subject to dismissal, and I found out he was an excellent student, but he had a big fight with his father and went off and married this girl and went to work and was trying to be a student and work at the same time. He wasn't doing very well. I helped him out by getting him special tutorial work with faculty. He was in the field of thermodynamics and heat transfer. He finally graduated. I met the father [chuckles]. I was invited to the house, over there where you live, incidentally. And had a wonderful luncheon with the family.

Also one of the students that I worked with very closely in the EJC later became a professor of civil engineering. He embarrassed me when he introduced me to his father and mother after graduation as a bachelor's candidate. He said, "This man has had more influence on my life than either of you."

Swent: Ooh! [chuckles]

Maslach: That's a pretty tough statement for a family to take. Of course, I smiled and later talked with them privately. I said--I used the paraphrase of the statement, "That's the bourbon talking": "That's the bachelor's degree talking." [chuckles] They understood it. We always remained good friends. But unfortunately that young man died a premature, early death, in a very, very strange, strange way. Something to think about. There is a very narrow pathway, about three feet wide, between the Naval Architecture building and the Civil Engineering building. People used to use it as a shortcut, just one building up against the wall. We blocked it off. He left his office and went into that narrow thing, and he had a heart attack.

Swent: Oh, my goodness.

Maslach: Found later, dead. Nobody even saw it. Eerie. Very, very sad, very sad. He was in construction engineering, a brilliant civil engineer.

Swent: You also made decisions on faculty that were heavy.

Maslach: The decisions on faculty were heavy, but they were very well accepted by everybody, with minor exceptions here or there. One of the procedures within the faculty handbook, Academic Personnel Handbook, to be precise, is that the dean has to make a comment on faculty--so my weapon really was that I would send back cases which I thought were too weak and our advisory committee, headed by Sam Silver, thought were too weak; and there were protests from the chairmen. They would say, "Well, gee, it's a good case." I'd work with the chairman and finally say, "Look, I have to send it forward with a memo of mine, and I'm going to say it's a weak case because that's what I believe. Do you want that to go through and have it turned down at the chancellor's office? Let's just educate this guy and bring it up to date with a better case next year."

I did that with a large number of cases in the beginning. As we got better in our production of our cases and there was more research components being put into the cases, the percentage that were turned down by the chancellor dropped off, and our winning percentage rose. As I said, when I became dean, it was around 35 percent. I had words with Ed Strong, of course, but I also had some words with Seaborg, Glenn Seaborg, who had been chancellor earlier and who did not think much of Engineering here at Berkeley.

But I worked on that pretty hard. I had ideas on various things. For example, I learned that--this is kind of sneaky, but I learned that we were trying to get a faculty member from back East--I'll think of the university in a moment. It was wintertime--Cornell--and I had been up at Cornell in the wintertime. It is a miserable place to live. The winds come off of the lake and down through Buffalo into Cornell. Ithaca is the name of the town. It is a mess. You get snowbound.

One day I noticed in the newspaper that Ithaca was having a major storm, and we were trying to recruit this guy. I just picked up the phone and called him, his office on campus. We got talking. He said, "How did you call this campus? Why did you call here?"

He said, "This place is shut down."

I said, "What do you mean?"

He said, "Well, I'm stuck here. I can't get home."

I said, "That's one of the nice things about Berkeley. We don't get snow. I was out sailing last week."

We started talking. I was never too blunt about it, but I'd point out, "Look, I lived back East for years. I know that you have to buy boots and snow gear for the kids." I said, "Look, as a present for you being snowbound, come on out. We'll pick up the tab. Stay at the Faculty Club. Bring your wife." This was the key. Call when they're having a storm. "Bring the wife to sunny California."

It worked every time. And I did it several times. I got the reputation on this, amongst universities, because I would be going to national meetings of university people. It was a technique, but it was one that I learned from somebody like Clark Kerr or Harry Wellman. In part, we pay off in sunshine. Maybe I learned it from Sproul. Bob Sproul used to say that. Yes, it was Bob Sproul who said our faculty salary rate is less than it is in other places, but we pay off in sunshine.

You can pay it off in other ways, too. You have no idea how much it costs to heat a house in Ithaca. The winter costs are thousands of dollars. Here our costs are so low, so there are benefits to moving out. We spent a lot of time--I spent a lot of time on getting faculty and the budget built up--industrial engineering. We also built up civil engineering, soil mechanics.

Of course, the largest big growth was in Computer Sciences. That's where we went from a small department to a department that's the largest one on campus. That was the big change during my tenure. When we finished, of course, we had over two hundred faculty. My last gift to the college was when I became provost I talked Bowker into approving my budget request, which was five more faculty [chuckles], which caused a little storm down there in the chancellor's office. Errol Mauchlan did not approve of that growth.

I convinced people that Engineering was no longer in the situation where they had to go out and recruit students. We were flooded. Within a year or two--which I'll get to next time--the flood of students at all levels here on the Berkeley campus was overwhelming us. Up to that point, we got the proper number of applications, the appropriate number of people accepted, and they finally came so that we kept a steady-state going. But the flood of students didn't occur until the early seventies.

It's hard to pick any individual things that we did and point to them. But there are all kinds of little things that happened. For example, the campus went from one big commencement exercise on the football field to commencement programs at the individual college level. This was kind of a boon for us because it allowed us to make it much more of a family thing. Before, we were lost in this big operation. But when we had our own, we would fill the Greek Theatre with parents and friends and what have you. We had hundreds of students graduating at the bachelor's level, hundreds at the master's level, and finally about 175 was the highest number of Ph.D.s when I left the deanship. So you're talking a thousand people.

Think about this. That's supposed to be a four-year program. You're supposed to have a graduate program, five years to get a Ph.D. How come you graduate so many people? One part is that they have a lot of transfer students at the junior college level. A master's is a one- to two-year program, so we are a very, very efficient and a very, very effective college of engineering. People then suddenly realized how big we were and how good we were.

This was very nice--although I do miss the big university functions. If I were able to wave the magic wand, one of the things I would do is to go back to the days when we had University Days and had speakers in the Greek Theatre--the thrill of Kennedy speaking before a hundred thousand people in the stadium. I think those kinds of things were out of this world. We don't do those things anymore. We didn't have Nehru speaking in the Greek Theatre recently, or anybody like him. This campus

can attract anybody in the world to come. We simply have that kind of global presentation to the media. We did have a lot of good speakers.

Swent: Was this part of the security concern?

Maslach: It started because the first commencements were being disrupted by activists. In fact, the inauguration of Heyman as chancellor was disrupted for a while, and then they left. But it was a messy sort of a thing.

### Changing the University Patent Policy to Reward the Inventor

Maslach: The other thing that happened when I was dean--these are examples of things that you do that you don't expect to do--I was on the committee for patents. I couldn't believe the patent policy of the university, which was to give practically nothing to the inventor and thus--they had very little income. I said, "That's why you don't have any patents. The reason you don't have any patents is people are taking them outside and getting a patent attorney and the full benefits."

Finally, the vice president, [Robert] Underhill, snapped at me. He was a bulldog type. He said, "Okay, George, what do you think the patent policy ought to be?" This is an example of my thinking on my feet: I said, "Well, just as a starter, I'll use Newtonian or classical procedures. Half the income of the patent goes to the inventor; half the income goes to the university." Well, we finally compromised that after the cost of processing the patent, half would go to the inventor and half would go to the university.

Within one year, we had ten times as many patents. Up to that point, the biggest patents were agricultural patents, like strawberries, brands of strawberries or carrots. The famous tomato, from the tomato harvesting for industry, which was a canning tomato. But now we have major patents in the electronics area and the biotech area. For example, biotech features are just wonderful. The recombinant DNA splicing techniques were developed here--not here, at San Francisco and Stanford, a joint patent. Well, the income from that is just enormous. We have a 50 percent share.

It turns out that patents don't really bring in big income. If you want to start a company, that's where the big income really comes in to the individual. Patents are not the biggest



thing, although you have to protect yourself on the patent side. I was able, just by that offhand remark in answer to a question from a vice president, to change the patent policy of the entire university. I always felt pretty happy about that.

Swent: Yes!

Maslach: We used to have a committee for the awarding of honorary degrees. This was a campus committee for the awarding of UC Berkeley honorary degrees. I was chairman of it for a number of years. I would come up with names, and other people, of course, would come up with names. The last honorary degree went to Jacques Cousteau, who was an engineer--developed scuba, which is self-contained underwater breathing apparatus--that's what "scuba" means. I thought he was an eminent example of someone who should be honored. I had a whole list of people.

Our next one I was going to propose was Anna Freud for the work she had done--not anything to do with her father's Freudian psychology work but her work on psychology in children. She really did an enormous thing. Hers is lasting work; his has been chipped away quite a bit over the years, but hers really--truly, if you look at her career, it's fabulous. So I had her down.

John Lindsay came--mayor of New York City. He was asked to come to California, UC, to give a Charter Day address, which he did. He was a liberal Democrat. The Regents at that time were extraordinarily conservative and filled with many people from Stanford. We had Stanford football people, for example, on the Regents. The Regents changed the policy. No more honorary degrees. So in the sixties, this was another byproduct, a horrible byproduct of the FSM. Lindsay came. He spoke. And he was given the Berkeley Citation, which was hurriedly developed by a committee headed up by Garff Wilson. He was one of the first public recipients of the Berkeley Citation.

A lot of us have the Berkeley Citation. One horrible thing was Garff Wilson gave the first Berkeley Citation to his secretary. When that came out in public, there was quite an outcry.

Swent: Oh, I daresay.

Maslach: Anyway--

Swent: So Berkeley gives no honorary degrees now?

Maslach: Hasn't for years.

Swent: I didn't realize that.

Maslach: I have gone to commencements throughout the world, and I think this is a major, major mistake. For example, the University of Paris, that I know well, the degree is Honoris Causa. It's not called an honorary doctorate. It's given for an honorary thing that was done, to honor something that was done, an honorable cause. They do it so beautifully. They do it with such great dignity.

Harvard still gives honorary degrees, and they are an example of what I consider the worst position in this degree-giving business. They give it to a lot of local politicians and alumni and what have you. It really cheapens the whole thing. A lot of universities still give them because it's a payoff for the commencement address. It was automatic. You got an honorary degree.

My memory, of course, was the wonderful commencement when I was the guide for Earl Warren. At one of the last commencements in the football stadium, I was the attendant with Earl Warren, who was then Chief Justice of the Supreme Court. He was to be given an honorary degree. We had quite a distinguished group getting an honorary degree at that time.

### Nobelists at Berkeley

[Interview 9: March 4, 1999] ##

Swent: Last week, one of our famous Nobelists died, Glenn Seaborg, and I thought this might give you a chance to talk about some of the Nobelists you've known and maybe Seaborg in particular.

Maslach: It's interesting that you bring up the subject because all of us, of course, when we saw the headlines sort of raked over our memories and thought about Glenn and his career, not only at the university but also at the Atomic Energy Commission.

With respect to Nobelists that I have known, the only one on the Berkeley campus that I did not know was the first one, who did work with fruit flies. You know, fruit flies are very, very valuable research tools because they have a very quick reproductive cycle. A generation of fruit flies takes a very short time compared to a generation of humans, so you can do a lot of work with fruit flies.

Wendell Stanley, a Nobelist with the tobacco mosaic virus, was head of the virology department here, was a good friend. Others were somewhere between good friends and casual friends. The easiest way for me to kind of explain it is that we had this remarkable Faculty Club--still do, of course--but when I came, and as a young person, certainly with a young reputation, could sit down and see all of these famous people, it was really quite an inspiration to me. I really got a bang out of that.

The amazing part of it is that these people would talk to you at any time. In the Faculty Club I remember once going over and having dinner, because I was busy grading finals, and I had to get the grades in the next day and I was behind time, so I went over there, rather than go home. I sat down, and this man came up to me and said, "May I sit with you?" I said, "Certainly." It was Wendell Stanley. We just got talking about various things.

Over the years, once you know a person either through a committee assignment or in some academic role, why, you continue that friendship, "collegialship," I should say--collegiality. For example, I knew Ed McMillan when he was back at the Radiation Laboratory at MIT. I remember him calling me once, when I was doing some research at what was called the College Avenue Pool. We just got talking, and all of a sudden he said, "Oh, George, I've got to quit. I've got a lecture in the next hour. I have to look at my notes." This was the idea of the way we kind of spoke with each other.

### The Faculty Club

Swent: About the Faculty Club, I've heard people speak as if there were sort of regular tables where people sat by department.

Maslach: Oh, yes. There was and is and continues to be a chemistry table, which is directly under the moose head in the main dining hall. The main dining hall was the first part of the building that was built, designed by Maybeck. You can see his style in the woodwork and structure. That in fact is where I met Glenn Seaborg, although I had contact with him in some academic committee of some sort as well.

The nice thing about the chemistry table is that I knew so many of them through my own work--teaching and research--and I just would be able to talk to them. For example, chemical

engineering is quite close to rarefied gas dynamics, and so therefore I knew the faculty there almost entirely.

Swent: How large were these tables?

Maslach: Well, the chemistry table is essentially about the size of the one we're sitting at, which is about five feet wide and about twelve feet long, so you get fifteen, twenty people around a table like that. There would be all kinds of discussions--different kinds of material. I used to talk a lot with Joel Hildebrand, who, while he was not a Nobel Prize winner, is certainly well known in the field of chemistry here at Berkeley--Hildebrand Hall, recognizing that. He and I--Joel, that is--we used to talk about our careers and how parallel they were. We were both in the Sierra Club, we were both hikers up in the mountains, and we were both skiers, cross-country skiers. We both had families and so on.

Swent: Isn't he the one who lived to be 103?

Maslach: He was over 100. I think about 102. He and Don McLaughlin had a standing joke going about who would be speaking at whose funeral. As Joel always pointed out, "The main problem for you, Don, is to be there." [chuckles] But we would joke and talk about various things. We also talked about things that are serious. Joel always had a very deep interest in teaching. He had strong opinions on the preparation for educators in the high schools and junior high schools. He felt the present technique of education was not what is needed. He thought that anybody that taught mathematics should have a math degree or at least a major in mathematics. Funny that I just saw on television a discussion of teaching credentials, and there's something like 10 percent of all arithmetic and mathematics courses taught in high schools are taught by people that never had a course in mathematics at the university. The only math they ever had was building them up into the teaching function. So it really is a sorry state of affairs.

Glenn and I just got together in another way, too. He was chancellor here at Berkeley. At that point, we had a very poor relationship with the chancellor's office--the budget committee--with regard to appointment, retention, and the advancement of faculty in engineering. I do remember early on Glenn telling me, "We know engineering." I looked at him. He says, "We teach the engineers chemistry, physicists teach the engineers physics, and mathematicians teach the engineers math. Therefore, we are the mentors, the people who are teaching you."

I said, "There's much more to engineering than physics, chemistry, and math. The engineering sciences," and I would rattle off a lot of different things. I did not have any effect on him at that point, I know.

The other famous people--famous in my mind, of course--were Latimer; Latimer Hall in chemistry is named after him. He used to be one of the great chemists, especially during the development of atomic energy and the first atomic bomb. I always recall reading the minutes of the trial of J. Robert Oppenheimer, in which he was stripped of his classification to handle secret material. You would have thought that [Edward] Teller and his comments in that hearing would be the most damaging, but they were not. The real damaging ones were by Latimer. He was quite a character.

My contact with him was through the Faculty Club and was really at the hearts table. He was one of the dominant figures in the hearts table program. He and Norman Hinds, the famous professor of geology--a very odd, erratic fellow--wonderful sense of humor. But I met them essentially through the social functions at the hearts table in the Faculty Club.

Another Nobelist that I knew well back at the Radiation Laboratory at MIT was Luis Alvarez. Luis was a tall, handsome, active physicist. Tended to be quiet. Listened very, very well and when he died was recognized as a physicist's physicist. He was the one you would go to and ask questions. Even his colleagues would defer to him, his judgment, which he exhibited many, many times. He worked in a great variety of programs. At MIT his controlled landing approach for aircraft was later developed and used worldwide. He won the Collier trophy for that.

When he developed a very sophisticated instrument for physics analysis, the hydrogen bubble chamber, why, he was awarded the Nobel Prize. But he would come down to the hearts table every once in a while. But my memories of him were way back at MIT, and I already talked about that--his proclivity to try to stump you with all these tricks and questions and so on--every morning.

I later met his son, of course, the son here in the department of geology. The son used--or the father used the son, whichever way--to develop a theory as to what happened to the dinosaurs. This is when there was obviously some great cataclysmic explosion which involved atomic reactions because throughout large areas of the world, there is a thin layer which

can be analysed, and that thin layer of dirt contains rare materials, which could only be caused by big astral catastrophe.

Swent: Cesium or iridium?

Maslach: I've forgotten what element there is that is the trace element that is used to identify that layer. It's one of the many theories but one that I think has a little more backing than others.

But then there were other Nobelists who came along, of course. I had a wonderful opportunity, without knowing it, to help a couple of them. Let's see. Shen in chemistry. I can't remember the first initials, but--J. T., I think. He used an instrument which I purchased through my funding, which I'll get into later, for new laboratory equipment. When he won the Nobel Prize, I remember he came up to me and shook my hand. He says, "That instrument was the most valuable."

A very similar situation--

Swent: What sort of instrument was it?

Maslach: Oh, it was a very fancy, very complicated spectrograph, spectroscope. It took practically all of the money I had. It was a hundred-thousand-dollar instrument. So chemistry that year got the lion's share of all the money for fifteen professional schools and colleges. It was a typical decision, I guess, I had been making all my life. That is, if I could see or smell something good coming, I would go for it and put all my resources and all my energy behind something like that.

I remember when I was actually provost and seeing the condition of the small computer in the statistical department, Department of Statistics, I should say. There was a request for memory to be purchased and added to the piece of equipment. I was kind of sorry for them. It was a pretty small piece of equipment for such a distinguished department, so I put a certain amount of equipment money into that computer setup, even though statistics was not a part of the professional schools and colleges. I remember later [Gerard Debreu]--D-e-B--you can look this up. D-e B-r-u-e something French. He got the first Nobel Prize in economics. He used that computer [chuckles], so we talked about things like that.

The man--I've got a block on the name--who won the Nobel Prize in physics for the first bubble chamber development was a member of the Department of Virology, an extraordinary fellow. He moved out of the physical sciences into the life sciences and

became pretty damn close, I think, to getting a Nobel Prize in the life sciences. I'll try to remember the name, but he was department of virology. The name is Don Glaser.

My contacts with the Nobel Prize winners were almost always social. The Faculty Club and dinners at their places, dinners, parties at our place--things like that. I used to think that I should have them more often in my home. I always thought my children meeting people like this was a big positive thing.

I remember going to the Seaborgs, and they would come to my place, but we never really made it a close friendship with any individual winner. I just felt proud that I knew and spoke casually to all but one.

Swent: That's pretty wonderful.

Maslach: That was pretty good.

#### Working to Elect a Prestigious Berkeley School Board

Maslach: The other area that I'd like to take up and move ahead with kind of overlaps the deanship and the provostship, but I mentioned earlier that I got involved in a lot of politics--first originally, of course, here at Berkeley and then later on in the national scene. Since this is a kind of an odd, tangential part of my life, I think we ought to get into it.

Basically, the political activity started way back with my father, as I said earlier, but when we moved to Berkeley in 1950, Doris and I got heavily involved immediately in local politics. The first campaign we worked on was one for getting Lionel Wilson elected to the Berkeley city council, a campaign that he lost. We were in charge of the house visits and so on--the only campaign he ever lost because he went on after that to an eminent career as a judge locally and then, of course, mayor of Oakland. He's a person we've always kept in touch with and visited with and had parties with and so on.

Shortly thereafter, why, Doris's interest and mine too, of course, went much more to the school board. We ran people like Paul Sanazaro, who was a gold-medal winner here as a student at Berkeley and then, when he took his M.D. degree in San Francisco, won the highest scholastic award there, the gold-headed cane. So he was certainly a fellow to reckon with. He went on later in

his life to head up one of the National Institutes of Health in Washington, D.C.

And then "Sparky" Avakian, who was a very active attorney and then became judge here for a long period of time and was considered for higher court positions, but never made it. I mentioned him earlier, I think, when Kennedy came here. We were running them together [chuckles]--Kennedy nationwide, but Avakian and a man by the name of Roy Nichols, who was black and became the first black Episcopal bishop. He operated in New York City. A great career in the church.

And then finally we had elected to that board Sherman Maisel, a member of the faculty here in Berkeley, economics. Took a number of years and was a governor of the board of--national [pauses]--excuse me, another block. But we had this man [Alan Greenspan] giving reports to Congress on the state of economy and the control, and whenever he speaks, why, the market either goes up or down. This is the national--

Swent: Economic Advisory Board?

Maslach: No, it's not the advisors committee. I keep thinking Financial Reserve or something like that.

Swent: Federal Reserve?

Maslach: Federal Reserve. You got it! Maisel never was the chairman of the board of the Federal Reserve, but he was a member for a number of years. Now, just think of that as a board, a school board. That was probably the most prestigious school board in the United States of America [chuckles]. We later ran for office Sam Schaff, who was my colleague in mechanical engineering and the rarefied gas dynamics division, so he served on the Berkeley school board, so here we have another eminent engineer-scientist.

That took a number of years. Of course, we got to know how to run campaigns, especially here in Berkeley.

Swent: These were years when desegregation was the hot issue, was it?

Maslach: Yes. The famous meeting where the school board voted to put in busing--break up the entire system, local schools, and bus people from the hills to the flat and from the flat to the hills. A famous decision. Very emotional, hot issue. We did it very, very early in the life of that issue.

Swent: This is in the mid-sixties?



Maslach: You'd have to ask Doris.

Swent: Carol Sibley.

Maslach: Carol Sibley was a member later on. She asked Doris if Doris was going to run, and Doris said no, she was not going to run, and so Carol Sibley ran. We helped run her campaign as well. In her book,<sup>2</sup> this whole school board period is a large part of her memoirs. I always remember--she had a fund raising party at her house, which is that big house up here on the North Side, which has been broken into rental units around it. It has a big garden as well. She had this big apartment, the main apartment, of course.

A lot of tables of bridge being played. I was assigned to a table which was in her bedroom. I used to go around afterward saying, oh, I was playing with Carol in her bedroom. [laughter]

She liked that. She would say the same thing. She was a very public figure. Her husband, who died fairly early, Bob Sibley, was very prominent in the Alumni Association here and UC Berkeley in general. Just a block off on the North Side. Quite an estate they had at one time.

Swent: You had a lot of influence on the schools.

#### Doris Maslach a Member of the Berkeley Rent Board

Maslach: Oh, Doris--you know, she made a career of it for about twenty years. And then after that, the rent board. She was a member and chair of rent board for a while, and still is active on rent board activities, working now with the League of Women Voters on a major report on housing in general.

The problem in Berkeley is not rent control. The problem in Berkeley is to build, and right now we're building nothing, and the reason we're building nothing is that no one will come in here as a contractor and build because it takes years to get all the permits, and then you have to agree to all kinds of stifling restrictions which are ridiculous. You know, it's really

---

<sup>2</sup>Carol Rhodes Sibley, *Building Community Trust: Berkeley School Integration and Other Civic Endeavors, 1943-1978*, an oral history conducted in 1978, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1980.

strange. You look up the statistics in the census, for example, of Berkeley--roughly a hundred thousand people. The highest percentage of advanced-degree people in the United States live here, and the lowest income. You've got a lot of Ph.D.s who are just out there doing nothing. A lot of activists who are still living here, with very low rents. That's the group that has benefitted essentially from rent control. But this is a very strange city when you get right down to it.

It's in the process of being enveloped. All you have to do is watch, and the Asian migration has slopped over from San Francisco--Chinatown and the Richmond District--and has moved more and more to the East Bay, and we have more and more property owners here in Berkeley. We're seeing the change of this entire population from, my perspective, the twenties to now the nineties. There's a French woman--prominent in France, Jacqueline. She came here. The first thing she said the last time--she was shaking her head, "George, San Francisco is an Asian city."

I said, "Yes. It always was to some degree, but now it's obvious." She was surprised at the change of population everywhere. And here's a person that has only visited us maybe three times in thirty years.

Well, because of my activities in Washington, D.C., on a variety of commissions and committees and what have you--

Swent: An astonishing list of committees, I must say. [See Appendix]

Maslach: Oh, yes, and I haven't even finished [chuckles].

#### National Political Activity: Meeting on the Plane to D.C.

Swent: It's really amazing.

Maslach: I got involved in national politics in a very strange way. The first thing is when you get on a plane from San Francisco to go east, why, you just look around and you see all kinds of standard people from the university, from Stanford University, politicians. Maillard, whom we helped elect when I was first here in Berkeley--I knew the family from way back. Why, there he is. He's going back to Washington.

Byron Rumford from Berkeley, who was a famous state legislator and still known, incidentally, for his work. In fact,

while I was waiting for you a couple of weeks ago outside here, another person was waiting, a young man, a student from Stanford. He wanted to get into The Bancroft Library, and what he was doing was going over Rumford's history and the history of the housing act that Rumford pushed through the legislature. He said, "That was one of the greatest pieces of legislation that anybody ever put through." You know, it's still having its impact. Rumford was a very quiet pharmacist down there on Sacramento Street. We got to know each other, and whenever we were able, why, we would sit with each other and chat about different things.

And the same thing would happen if you were on the other end of the line, coming back to San Francisco on Sunday night. You would see people at the airport, and you would arrange to sit next to each other. It's amazing how many politicians I met that way. I was on, as I said, the Congress Technical Advisory Board for years with Herb Holloman as the assistant secretary. Did a lot of very good technology reports for the economy. Herb was an amazingly creative fellow.

For example, when we were working on the problems of air pollution and automobiles--electric automobile and so on--he just came up with the idea that the government as a purchaser of many, many automobiles--at that time, the Post Office was in the--a branch of the government, not the separate arrangement they now have. He said, "Why don't we just get all of the Post Office vehicles from now on have to meet certain standards on pollution and use this as a test vehicle?" Well, he did this over and over again, using the economic power of the government to kind of run experiments and to fashion new technology to improve, in this case, the environment, but he had other types of instruments as well as automobiles that he worked on.

#### Chairing the Shipping and Hovercraft Committee

Maslach: The committee that I chaired there was the shipping and the lighter-than-air--lighter-than-air--I've got a block on what they call it. I've forgotten the name. The hovercraft. The big hovercraft was essentially pushed by the navy. We found out pretty quickly that it was going to be a long, long time before it would ever get to the point where we could talk about building destroyer-type ships, as a hovercraft.

But one day I was chairing the manpower commission, which was normally chaired by Dael Wolfe, a famous editor of Science

magazine, which is the magazine put out by the American Association for the Advancement of Science. It's a premier magazine for science and Washington happenings, especially. If you were in the business of working in Washington, or going to Washington, you took that magazine and read it pretty heavily.

### Serving on the Manpower Commission

Maslach: The reason I was on that commission was very simple. I at one time made a remark about my experiences at the Radiation Laboratory at MIT, and this was the same as people working on the atomic bomb and so on during wartime. While we should not have been members of the military as such, there should then maybe have been a recognition of this work, and we should have been in some kind of a--I won't call it a Peace Corps, but the Peace Corps equivalent. People at the Radiation Laboratory went into the battlefields. Wore khaki. Not uniforms, but they did have insignia and cards and so on to identify them as specialists.

The concept of specialists in the armed services has not been publicized--this is done all the time. So that concept of having a group, a category who would be basically engineer-scientists who were working on projects, rather than being in the army or the navy sort of appealed to people like Herb Holloman and others, so I got on that commission.

One day I was chairing a meeting. You have to understand, I guess, the dynamics of Washington meetings and committees. Many of the committees and meetings are staffed by people who come from Boston--Harvard, MIT--and Yale--or New York City or, of course, Philadelphia and Washington. They fly in. They want to get back out.

##

Maslach: Therefore, many committees will start at nine o'clock in the morning so that everybody has time with early flights to get into National Airport or wherever and get into the Washington scene. And then about three o'clock people started to get nervous, and they start moving around, itching to get out. They would have to grab a cab, get over to National Airport, and take their flight home. This is a big shuttle system that operates in the corridor from Washington, D.C., to Boston, so you always had this kind of a situation. You started early, but you finished early.

One day on this Manpower Commission I'm chairing, I'm listening to some presentation. Incidentally, we would have written presentations from people like Ted Kennedy. We had an oral presentation by Bob Kennedy. As you may recall, this was a post-Vietnam scene. Just the ending of the Vietnam scene or thereafter. But anyway, there was a lot of hot issues, the main one being that the percentage of soldiers in Vietnam was overwhelmingly black. You probably never realized, but anybody that can get into a college and stay in college during those years was exempt from the draft, so people that went to college, of course, were primarily upper-class, well-to-do people. They had a deferment.

This was a hot issue during the FSM [Free Speech] movement here. I remember people speaking about this. It was odd because the people who were doing the activist thing here at Berkeley were all people that never were in the army, never served, and in fact were here under a deferment because they were in college. Here I introduced a new element--here, you're out of college; you graduated; you're maybe from industry, but you are in a scientific corps of the federal government. So there were a lot of issues.

The report of this Manpower Commission was destined to--in fact, originally was organized to help Congress in developing a new Selective Service Act, so it was not a casual issue that we were dealing with there. Anyway, I looked up about three o'clock, and I saw Herb Holloman way in the back of the room. He waved at me, and I waved back, and we kept going. He was inside of a projection room in the back of this small auditorium on the telephone [chuckles]. I thought, What the hell is he here for? I'd never seen him at that committee meeting.

#### Vice President Hubert Humphrey Seeks A Scientist's Advice

Maslach: We finished up, say, three-something, and he walked in and said, "Hey, what are your plans for dinner?" I said, "I don't have any plans for dinner anywhere." He said, "I want you to come with me." He got back on the telephone. That was a bit of a mystery. I got all my stuff together. This was a Saturday. He came back in after the committee had all left, and he said, "I want you to come and talk to Hubert Humphrey." I said, "What?" He's the vice president of the United States. So, okay, we get a cab and get over to the old State Department Building, which is that great baroque building north of the White House, connected to the

White House, and sort of an overflow now for the White House staff.

On the end of the building, facing the Washington Monument is this wonderful office and offices with secretaries and what have you. There was Hubert Humphrey, vice president of the United States. We sat down. Herb had deliberately not told me what the purpose of the meeting was, even though I asked several times. Humphrey then described what was happening in Washington, D.C. This was the period of the Tet offensive. The Tet offensive had pretty well run its course, and the United States military had been whipped something pretty fierce. Tet being a reference to a religious holiday.

What I heard was that President [Lyndon B.] Johnson had just holed up in the White House, canceled all of his meetings and appointments and so on, and was struggling with the Vietnam problem alone. He had lost total confidence in the military-- [General William C.] Westmoreland and others--and he was really just struggling what he should be doing. Both Holloman and Humphrey agreed that he still respected scientists--engineers and scientists--such as we represented right there. Hubert was casting around for ideas. At one point, to my great astonishment, and this is something that has lived with me to this day, he leaned forward--we were on the corner of this big desk--he touched my hand and said, "George, what do you think we should do?"

Just put yourself into my position. Here you are, dragged into this meeting without any prior notice and any knowledge, and the vice president of the United States is asking you what we should do about the Vietnam War. Now, that gives you an idea of the state of mind in Washington, D.C., in general. They are constantly trying to make contact with people outside of the Beltway, get ideas and so on.

Swent: What was your answer?

Maslach: I've forgotten. Oh, yes, I do remember. Excuse me. I do remember. In my usual flip style, I said, "Gee, I think the senator from Vermont has got a good idea," the elderly senator from Vermont, who had proposed that we just pull out of Vietnam, declare that we had won the war and it was a victory, and leave. I thought it was a rather good idea. Actually, in the end, that's essentially what we tried to do. We had great difficulty in pulling out, of course, but essentially we've always claimed we won, which we did not.

I was sitting there, talking with Humphrey. Holloman was on the telephone. I don't know what the hell he was doing. We talked about a whole variety of things. I knew some of the history of the Vietnam War, and I knew something about student activism here. But, for example, [President John F.] Kennedy sent the first armed troops from the United States to the Vietnam area--10,000 armed troops. Up to that point, there was only unarmed advisors--a lot of them, but not 10,000.

There was a lot of discussion of what we did and how we did everything so badly. Humphrey especially just felt there were so many things--for example, the Kennedy administration inherited from the [Dwight D.] Eisenhower administration the whole concept of going into the Bay of Pigs in Cuba. Rather than saying, "No way" and dump it as a project, the Kennedys essentially embraced it. Our whole relationship with Cuba--the missile crisis and so on--was all part of a bad decision on our part--I mean as far as I'm concerned--not on my part because I had nothing to do with it.

So there are all kinds of soul-searching in this thing. People didn't know whether they were right or whether they were wrong. There was this great dichotomy. The moral position in Vietnam is wrong, and our political position was ridiculous. The domino theory--that was just a farce. And the whole petitioning by the navy, based upon the Tonkin Gulf incident involving naval shipping. My belief to this day is that was a fake. It never, never happened. You watched the news broadcasts, and three admirals are standing up there at the map. They cannot point to where the thing occurred. They cannot locate where the Tonkin Gulf incident occurred. The whole thing was just a frame-up as far as I was concerned.

Of course, later on, with the book by the former Secretary of Defense, admitting the war was a mistake. I think now he gives us a clear historical picture.

Swent: That was--

Maslach: This man with the slick hairdo that came from the Ford Motor Company. We'll think of the name.

Swent: Robert McNamara?

Maslach: McNamara, right.

So we're talking various things back and forth, and, as I say, Holloman comes back--he later went on, after Washington--he went on to MIT, where he was some kind of professor. Holloman

came back. He said, "We're going to go over to see Clark." It turned out that this was the second day of Clark Clifford being Secretary of Defense. We said goodbye to Humphrey. He said, "Drop in again. Please come by," and so on, and this and that. I did a couple of times, but anyway--

#### A Meeting with Secretary of State Clark Clifford

Maslach: We went over to the Pentagon. Holloman, of course, as Assistant Secretary of Commerce, had a lot of clout. We were met where the taxis dump you, the basement, and there was a colonel. We were whisked upstairs on a special elevator to Clark Kerr's office. Clark Kerr at that time--

Swent: Clifford.

Maslach: Clifford. I'm sorry. Clark Kerr! Clark Clifford [chuckles]. A wonderful Freudian slip [laughter]. Well, anyway, here's this man--of course, he was much younger. He just died, as you probably remember. He was considered the absolute insider, Mr. Washington. He knew how to do things. He ran a big law office, and now he was in a major position in the government. Very smooth, very suave. Tall, great patrician appearance. I would certainly like to have had him as my lawyer.

He didn't say much, but he knew what we were there for. He went through the whole thing. His problem was that President Johnson had lost confidence in the military and the Department of Defense. Here he is, right in the middle of the Tet offensive, moving in as a new Secretary of Defense. He was in a real tough position, and what to do. You probably remember Westmoreland, with his body counts and this and that, which proved to be false.

We were talking about various possibilities, and one of the things that came out there was--I don't know if this was the beginning. I have a feeling that Holloman and others had been talking about this plan before I got involved, but eventually a number of small committees were formed--I was on one. The first one that got public recognition was a committee which was headed up by an old buddy from the Radiation Laboratory, Zacharias. He was a major figure at MIT in the Rad Lab days. I was not really his buddy. I was certainly close to him in certain things, but we were more, because of his character, on a formal speaking condition. We were not casual and friendly in that regard. But we were colleagues.



He had done, on his own, probably commissioned by [the Department of] Defense or somebody, after World War II an analysis of the effectiveness of bombing as a technique of war. There were many small committees and groups that were roaming all around Europe, probing into all of the debris and examining what was going on and actually what happened, because we did not know the effectiveness, the great effectiveness of Germany putting military factories underground. They were just not susceptible to bombing.

And the use of distribution techniques and so on, making parts for different instruments or pieces of armaments. For example, the Radiation Laboratory had a group over, all throughout Europe, looking at what they had done in radar development and so on, why they had stopped. You probably have read some of the reports, for example, of a group that went over, looking at what had been done in physics with regard to atomic bomb development, which had been actually stopped, for a variety of reasons. We still don't know the real reasons because the people have died. We'll never know why one of the top physicists in the world decided not to do this although they had already known the possibilities.

Anyway, the Zacharias committee essentially rode on the coat-tails of Zacharias's analysis of World War II and came up with a headline-making statement, which was that we should not be relying so heavily on bombing; it's already proven in Vietnam not to be effective, which was a distributed economy much less concentrated than Germany, and it was not having its effect, and this was a foolish endeavor. Zacharias could be very, very specific and very sarcastic in his statements. That was one of the first committees that was formed and actually got some notice out rather quickly.

#### Working to Bring About a Peace Settlement in Vietnam

Maslach: I was assigned to a committee. Basically, we did not meet as a committee. The whole concept built on--whenever you're in Washington, what you do is you go over and read up on this and make comments and suggestions and recommendations. So the committee that I ended up on was essentially one to work on bringing about a peace settlement. One of the major problems was the secretary of state, who was from the South and was appointed by Kennedy. He was famous before he became secretary of state for his recommendations that we ought to drop the atomic bomb on

Moscow. This is while we were allies of Russia. This is the very last days of the war.

Rusk was the name of--

Swent: Dean Rusk.

Maslach: Dean Rusk. I'm going to condense a lot of this, but we came up with all kinds of things. I relied heavily on my opinion, which was we ought to be working, pulling in, the U.N. [United Nations] on this. This was pursued. I got into one trip--at least two trips--in which I visited the U.N. and met U Thant, who was then Secretary General, and then the American representative was Adlai Stevenson. So I got to--I knew Adlai Stevenson before. We worked heavily on his election, which, as I think I said already, I probably drove more Republican old people to the polls than I drove Democrats, based upon the results of the polls on that precinct where I was working.

#### Adlai Stevenson, Not Decisive on Major Issues

Maslach: But anyway, I met Adlai Stevenson. I was able to get sort of an idea of him again. I was mesmerized, as most of us were, by his ability to speak. He just never gave the same speech twice. I swear, he never used the same sentence twice. He was so eloquent. His choice of words was so beautiful. But then, when I had contact with him at the U.N., I suddenly realized that he would not have been a good president. That was just because he was always "on the one hand this, and yet on the other hand, this," and he would present the two sides beautifully, perfectly. And then you'd wait, "Okay, now what, Adlai?" expecting a decision, "We should do this." You never heard a decision, never. I always thought that he would vacillate on major issues. He would be probably prone to the influence of outsiders.

But it was rather interesting to watch everything that was going on. If you recall, when we got later on into the peace treaty period, Dean Rusk gave a major speech before the American Society of Reporters and Editors--or Newspapermen, or something like that--in which he belligerently was talking about they would have to come here and so on. He would not go there.

We met the next morning, I remember. We were given tickets to the speech. It was in Washington, D.C. The next day we met in Washington. I think we went on to the U.N. in New York. No, we did not. We stayed in Washington the entire time, because we

came up with the suggestion and that is that Johnson ought to overrule Dean Rusk and agree with the U.N. recommendation, which was that the peace treaty be carried out in Paris. This had been an offer of the French government. The French government, as you recall, had a long history in Vietnam, Indochina, before we did.

That afternoon we got into the White House--got a panel into the White House. I wasn't there. At the press conference the next day, the next afternoon, something like that, why, Lyndon Johnson had already talked with Dean Rusk, and Dean Rusk at the press conference made a change in his position. He came in, made the statement that he would accept the U.N., etc., etc., going to Paris, and that was it. Then he walked out. No questions. That was that.

So we had that kind of influence as a committee upon the president, upon the secretary of state, to further the peace treaty activity. I always remembered after that, months after that--if you recall, there was an absolute stalemate between the --a three-way stalemate, really--between the French and the Vietnamese and the Americans as to the shape of the table.

Swent: I had forgotten that.

Maslach: That took months! Really, the war was going on, and this took months. Eventually, I am quite sure, although I cannot state whose idea it was--it certainly wasn't mine--but we ended up with a table which ended up with four sides. Then we had two appendage tables, like little appendices, on two of the corners. These were square tables with staff.

Basically, the issue was that the Vietnamese did not want any staff people sitting at the main table--only the top people representing the nation, who had a vote, essentially. But everybody else sat out. Originally they wanted them out of the room. Eventually, they admitted them into the room, and they were on a little table off on the diagonals. So we had this--

I had a funny feeling about all of this. This is what diplomacy is all about? [chuckles] It took weeks of discussion and meetings. I thought that was one of the strangest periods of my life. You really did have a feeling--I did--of being Alice in Wonderland. What were we doing? I'm an engineer! In on all of these things.

Swent: You just go ahead and do it.

Maslach: Well, that's it. Of course, throughout my career, everybody has recognized that I'm the type that doesn't wait for long. Once I

see a certain clarity and I agree with positions, I want to move. That's very helpful, especially in the Washington scene.

I recall coming home that first time after meeting Humphrey and Clifford--others and so on--I got on that plane, six o'clock, Dulles [airport]. Got a seat in first-class for an extra twenty bucks or whatever it was--twenty-five dollars, I think. I just looked at the--they used to call them stewardesses.

Swent: Flight attendant, now.

Maslach: Now they're attendants, cabin attendants, but I just looked at this woman and said, "Whatever you've got, I want a double." She knew exactly--people come onto that plane glazed, their eyes--and they just want to relax. That's part of that flight home, is you can unwind, and you do it. But a good deal of alcohol. Don't kid yourself.

So anyway, I got home, and I drove home from the airport. Now ten o'clock at night. I had to go to work the next morning. I turned to Doris, and I said, "You'll never believe what happened." So we were up till midnight, just my describing this whole thing. I always get tears in my eyes, thinking about it because it was such an emotional thing. What are we going to do?

Swent: And I'm thinking, only in America could this happen.

Maslach: Well, I think this happens elsewhere, but it showed the depth, absolute depth of inability to deal with a situation. It was a war the country was not willing to go into. It had no commitment to this war at all. It was not like World War I or World War II.

Swent: No.

Maslach: Even the Korean "police action" took much more public support. Vietnam divided us. It divided us, of course, very badly. But here the vice president says, "George, what do you think we should do?" I couldn't believe it. I swear, weeks thereafter my mind was only half--I just couldn't get this out of my mind.

In many respects, that was kind of my big fling [chuckles].

Swent: Well, that's certainly a high point.

Bringing Nobelist Charles Townes to Berkeley

Maslach: Well, it's an odd point. You never expect this. You have people here on the staff--for example, a Nobel Prize winner, Charlie Townes. I failed to mention him. I think I already covered this earlier, but one of the great people in the College of Engineering was Lotfi Zadeh, chairman of electrical engineering. He and I were both on the visiting committees at MIT. We knew that they were going to lose some people when they chose a new president, and they did. They chose Jerry Wiesner, an old friend of mine at Rad Lab, and guess what: Charlie Townes was a candidate for that position, and therefore Lotfi visited me as soon as he came back from MIT, and we got together with Clark Kerr--actually, first with the chairman of the physics department--would they accept him as a professor, Charlie Townes? Oh, yes, but they had no FTEs.

And then we went to Clark Kerr, and we got an FTE transferred from "systemwide" to Berkeley and from the Berkeley chancellor's office to physics. Of course, I kept everybody in touch with what I was doing, and we got Charlie Townes, Nobel Prize winner, who is still working--a great, great career, one of the great Nobel Prize winners, in fact. Many of the winners you never hear of again at work, but Charlie has just worked constantly since winning that prize. The prize, of course, goes back to the Radiation Laboratory--microwave amplification, light amplification. So Charlie and I have always been close. His wife and I have served on a number of committees here on campus.

I got back home from this whole thing and went on various things. I think I've already covered my work with Robert Kennedy, haven't I?

A Recollection of Robert Kennedy the Day Before He was Killed

Swent: I think--

Maslach: I think I did.

Swent: I don't know whether you covered it, but you did talk about it. If there's more you want to add later, you can.

Maslach: When I was making comments to one of his staff, and later I was essentially asked to be on his advisory committee, which was not a real committee, again, but just a bunch of people who,

"whenever you're in Washington, come to the office and look at stuff and give us advice," which I did. I think I told you about his staff calling me, he talking to me the night before he was killed. In fact, I know I talked about this. To hear those firecrackers going off in the Chinese New Year's parade, where he was at that moment, that evening, just struck me. Another thing that lived with me the rest of my life. Just a strange, strange man. Driven, a driven man. Again, a person I don't think would have been a good president. He was just so wrapped up in his own biases.

So much for my activity in politics in that regard, although a lot of it continued on with my naval--twenty years of being on committees for the Naval Academy and the postgraduate school, and this lapped over from engineering into my provost period. But you could not help but be in meetings with congressmen and admirals and Chief of Naval Operations and all this and that, you know, and not have some kind of an influence.

#### "Dragging the Naval Academy into the Twentieth Century"

Maslach: I remember my first meeting--I told you about this--I visited the Naval Academy so-called computer center and came back at lunch and said, "I know what my job is here, and I know why you asked me to be a member."

##

Maslach: I said I felt like I was dragging the Naval Academy into the 20th century with computers because I knew the computers that were on shipboard--heck, I remember computers on shipboard back in World War II, when I was in the Radiation Laboratory. And so I felt that the midshipmen were not getting the proper education in computers and what they could do and what a computer cannot do. You realize that this board consisted of some academics and, as I said, some admirals and some former navy people but also some ranking admirals who were operating within the navy, and then we also had some representation from Congress, usually congressmen from the area or nearby.

Jeff Cohelan was a member of that committee. He was from Berkeley, California. Anyway, people would size you up. I always remember when I came back and I made that speech on computers, the head of Citibank, who was on the committee, former navy man, was really staring at me and sizing me up. I had all kinds of recommendations from him. He obviously figured that I

was a "comer" and therefore I should be pushed. After meeting with people like Paul Nitze, who was secretary of the navy, and John Warner, secretary of the navy, I was asked to take these jobs in Washington, D.C.

The high point of that political period was when I was a provost and Lyndon Johnson was calling me--not calling me--his office called me and wanted to know if I would take a certain job, assistant secretary. He read out all the jobs. People were fleeing Washington, fleeing Johnson's administration. He had empty positions everywhere. I was not interested to go to the last two years.

The one thing I remember is Lyndon Johnson, with his colorful speech--every sentence had at least one curse word in it--and I couldn't believe it when he was talking to me. I just couldn't believe it. That was one of my telephone conversations at high level. I kind of was pulled out of the Washington scene with the Nixon administration coming in. I just was not a member of the Commerce Board or any of these other things any more. I retained my position with the navy, but that was a far cry from the activity--

It's hard to explain to you. It's something you had to feel. The level, the intensity, the energy in Washington during the Kennedy-Johnson administrations was extraordinarily high. It just collapsed, of course, with the Tet offensive and then on, but during that working period, it was amazing what went on. You would feel it at the airport the minute you walked in, the minute you went into buildings and talked with people. Everybody was intent to do something. There was a great, great desire to do something.

Swent: You touched on this slightly, but we hear so much now about the Beltway mentality and people being inside the Beltway or outside the Beltway, and here you were flying from one side of the continent to the other. Was there that sort of split?

Maslach: Oh, yes. There was no question at all. It was deliberate. People were being asked from Harvard, Yale, MIT, what have you, to come down and advise. Basically, you were asked to be critical. You were asked to be forthright and blunt, honest. This was a natural thing, but I think it was even more appropriate for academics to act this way.

People in industry--for example, we had Turner from the Turner Construction Company, a great international construction operation. He and I got to be quite friendly. But he would not speak in these terms that we academics would speak. Academics

sort of have a special position in our culture, and they're allowed to be noisy maybe, or forthright or independent. We don't represent a commercial interest. In a way, we do because we get money from the federal government for education, but we don't have a personal career involvement, which we would get profit from, our activity, by knowing people in the federal government.

So yes, the outside-of-the-Beltway mentality is quite different. I have to say, however, it's kind of a double jump problem for someone coming from Berkeley because Berkeley has a mentality--there's no Beltway around Berkeley, but, boy, there is an intellectual feeling within Berkeley. There is a larger element of activism and do-gooder feeling that the rest of the world laughs at. All you have to do is go to Richmond. You don't have to go very far.

Swent: Richmond, California.

Maslach: Richmond, California, right. Or just go up to the mountains, which I like to do, and talk to people. Man, you learn very quickly that Berkeley position is not a state position, is not a national position. So I have to invert my head two or three times, going from Berkeley, out of Berkeley, and then into Washington. Boy, I'm going from one culture to another.

Swent: You mentioned this, too. There's much more awareness of Asia. We do face west.

Maslach: Yes, yes, yes, there's no question about it. And, of course, people take your word about Asia. If you know Asians well--you have been to China, Japan, and so on--why, you're an expert automatically. You go to New England and you're out of it.

Swent: They face another way.

Maslach: Oh, yes. They face a different way. There's no question about it. People don't fly from New England to California as much for vacations as they fly from New England to old England.

Swent: Yes.

Maslach: It's a different world.

Swent: Even today that's true.

Maslach: Oh, yes. I still feel it all the time. Anyway, all of these political things came with the territory.



Swent: I have another question. Did you clear any of these things with someone else? I guess I'm wondering if anybody ever questioned whether you should be spending so much time doing these things. Did you ever have to justify these activities as benefitting the university?

Maslach: The first statement in response to that is that it's amazing how much of this was on my own time. That's one. Two, I did spend a lot of time on it, but those weekend trips were from a couple of hours Friday and that's all that was lost as far as eight-to-five, five-day-a-week time goes. When I was teaching, for example, I did all my preparation of classwork in my home. There have been surveys over the years that have never reached the light of day the way they should, that point up and prove it, that the faculty spends about sixty hours a week on faculty work, to the best that you can judge it.

It's impossible to get a number on it because when you're doing research, you can wake up in the middle of the night, the way Mel Calvin did--I'm sorry. He didn't wake up in the middle of the night. He was sitting--Mel Calvin was sitting in his automobile at the co-op, waiting for his wife to finish shopping one evening when he got the idea that led to his Nobel prize. You just cannot separate out when you're going to come through with something. A lot of your time is worry time: are you going to get that contract? Well, you have to go back to Washington for a lot of these things, sometimes.

It was important to get the dean of the college involved. We quickly gained more from visibility--the reason MIT and others are so well known is they're next door to Washington, D.C. I mean, Wiesner was the science advisor to Kennedy. The interlocking is remarkable of the East Coast Ivy League to Washington, D.C., advisory. Georgetown University, right there in Washington, D.C. People are half time over there, in the capital.

So I was never criticized in terms of doing too much time there. I remember Roger Heyns, of course, giving me that famous little comment of his. He said, "You could always tell when there was going to be a protest meeting because George was on his way to Washington." It was quite true, unfortunately. But much of this is, again, what comes with the territory. When you're asked to do things--I turned down as many things as I was asked. When I was on the Navy Board, advisory board, the Air Force Academy in Colorado asked me, really pressured me, but I said no.

I turned down a lot of other things, including private industry things that I maybe should have done. There was a

company--I won't name it because it's still in existence and heavily involved--but they wanted me on their board of directors. It would have been a big financial gain for me, but I decided it was not the right one to do, so I didn't do it.

To answer your question very directly, no, I was never criticized. It did affect my career as a faculty member because, unfortunately, as a dean and then as provost, I let drop a lot of my research. That I missed. I recognized I couldn't do day-to-day teaching because of the schedule problems. But I should have hung onto graduate students and done more research. But that's one of the things I made a conscious decision on, and I opted that way.

Ernie [Ernest] Kuh, who was dean after I was, had a very good technique of maintaining his research activities, by taking the summer period, taking a nine-month appointment in the deanship and then in the summer he could just concentrate on his research. Unfortunately, summertime is when you put the budgets together and when you put together all of the cases for the top faculty of the college, so summer is not a time that dean's office is just sitting, twiddling its thumbs. It's working, very hard.

#### Roger Heyns, a Wonderful Chancellor

Maslach: To get back kind of to the campus, if I may, we had gone through chancellors at a fairly rapid rate. When Roger Heyns had his heart attack, this was really a major blow to us because he brought stability to the campus. He was famous in Michigan for tackling an activist who wanted to get on the stage and grab the microphone. He was like Hayakawa, ripping out the wires of the truck. Heyns actually tackled the student activist. That was one of his strong points [chuckles] when he was appointed here as chancellor. He was a psychologist, from a very, very prominent department of psychology. You know, just a wonderful person to work with.

As I earlier said, he worked with large groups and spread his influence and his personality, and he was very effective, in a low-key way. This low-key thing was very useful in stabilizing the campus. We went through a difficult period, of course, with him, which was the Third World Movement protest, in which we had damage to buildings and things of that nature. But he always seemed to get control. He was a wonderful person for this campus.

He told me, I remember--and also he talked to Bowker and so on, but he never had an opportunity, never had the time to really get down into the academic workings of the campus--the budget, for example. He felt he was not good in that area, but you couldn't fault the man. He truly, truly--on total record--was a wonderful person for the campus.

#### The Search Committee for a New Chancellor: De-Selection

Maslach: I was chosen as dean of engineering to be a member of the search committee for the next chancellor. The chairman of the committee was Dean of the Law School "Sandy" Kadish. Sanford is his proper name. We had student representation on the committee. "Buzz" Barber was one of the students at that time. He's now in the development office. I can't remember the young woman they had. I can't remember her name. A professor of statistics, David Blackwell, was the one who recommended Bowker.

We met in University Hall. They set aside a conference room on the top floor, and we had access to that room and other rooms in the university president's office. We had total control of long-distance telephone and travel, if necessary. It was a well-funded committee, and it was chaired by Kadish, who was extraordinarily effective--the proper balance of moving ahead with deliberate speed and yet constant attention to the main goal: namely, the personality and the type of person that we wanted.

If I might digress and be more general, it's amazing, if you look at the appointment of presidents of the university or chancellors on the Berkeley campus, but after you go through the standard requirements of a person--being a stable person, having a degree and a specialty and is able to be appointed as a professor to be on the Berkeley campus--all these are the standard things--then what you do is essentially appoint for the problem at hand. Clark Kerr was appointed president for his work on multi-campus development. Other people came in because they were experts on budget development, working with the legislature or the governor and so on.

On the Berkeley campus, we needed somebody--we wanted somebody who was going to be a, quote, "academic," who would represent the programs and work on development of programs. We had Meyerson, of course, and Heyns--were stopgap type appointments. Good ones, excellent ones, but they were not,

quote, "academics" and did not work in the development of the campus.

And the campus was going through a major change. Greater emphasis on graduate work and also, later, admissions problems and so on. We needed someone with this kind of a background. The buzzword at that time was "charismatic."

Swent: Oh, yes.

Maslach: Everybody was always judged as was he charismatic or she charismatic. You had to prove you were charismatic. You also--not quite a buzzword, but your appearance, your physical appearance was part of this charisma business. I always remember the professor of statistics--black, incidentally--he said, "Well, I have a person in mind." This was our first meeting, and we were all just kind of spilling our guts and talking about people we knew that might be a candidate. He says, "He's not charismatic." Everybody laughed, of course, because that was kind of an "in" joke. "In fact, someone once said that he looked like a rumpled bed. He's not a figure of sartorial excellence, but I think he's going to be on the short list." So that was our first introduction to the man who was later identified as Al Bowker.

Swent: You said the professor of statistics--his name was Black? Or he was black?

Maslach: No, no, he is black. I hate to admit this--forgetting his name--for he is truly one of the great statisticians of the world in the last century. Just soft-spoken, quiet. His wife is a piano player. She plays jazz, and she's got the greatest left hand. She could play stride jazz, with that strong left hand, better than anybody I know. She was wonderful.

At any rate, we started in. Kadish had a very simple procedure. He didn't use the word, but in a year or two it was word that haunted me in my work. The word was "de-selection." Basically, what you do is get as many people that you think are qualified, and you start getting telephone calls and writing letters and getting information back. You get much better information from telephone calls because people will level with you. We didn't tape any calls or anything like that, of course, but people would say yes, no, and give you the reasons. But this was all confidential.

We had internal people; we had external people. This was another big divide. Should we have external or internal? Heyns was external. A lot of people think after a while external

people--they serve their function to stir up the mechanism; now you should have an internal person. A lot of arguments that it should be an internal person because the Academic Senate is such a powerful part of our activity and just to understand the Senate and its operation you need an internal person [chuckles]. You get all kinds of arguments.

There were a few internal candidates that were proposed at the time, but basically there were people from outside. There's a rich field of people from the outside. You look internationally. That just happens to be the kind of argument you might have.

We would meet every week in the evening, five o'clock--or six o'clock, I think--we had dinner out and just have all this material. We had very fine staff, and all these candidates that were being proposed. The de-selection process was one that didn't start from the top in saying, "Let's consider the best people" but basically started from the bottom. De-selected, do not select. If you de-selected, you dumped.

Now, in engineering, this is a technique of analysis that's called a moronic approach.

Swent: A what?

Maslach: Moronic. The moron's approach. I mentioned this to Kadish. If you're a moron, what you do is just knock away all the people you don't want and guess what: you end up with the person you want. But you don't decide on the basis of excellence. We had forty, fifty people we were talking about here. And we're talking two levels down, the people that recommended them, and we would ask those people for other people. You got an onion-skin kind of an operation, peeling the onions to find out the qualities of that individual.

We just were going through this process week after week, going down there during the week maybe to read cases that were nominated. It was a real tough job, but it was wonderfully handled. Kadish--I was really very, very impressed with his ability as a chairman and with his driving force, every meeting, we dumped a few. We got rid of some.

The value of the technique is that you're not surrounded by a lot of junk. You get rid of people that are not going to make it, very quickly, so they don't impinge on your thinking. We went on for several weeks. His technique always was the standard technique, of course, in decision making. Everybody would write down their top choices--or the bottom choices if you're de-

selecting--the bottom choices, and we would just get these secret ballots, and then we would put their names on the board. Guess what: we drop these people. And you could see the process of people rising--people that stayed in there, people that got good votes, top votes.

Well, it came to pass of course we get down to our short list, and we had a short list. You can never just go in with one name. That's essentially taking over the president's and the regents' authority. Incidentally, we had regents in attendance at this group. Anyway, we finally got down to about three people, and then we had people come out and visit. It was very interesting.

### Chancellor Albert Bowker's Fantastic Reservoir of Knowledge

Maslach: I remember sitting for my first time with Al Bowker. We didn't know each other. We kind of checked our backgrounds, and we found out that we did have a lot of common friends. He, of course, was at Stanford for years. He was chairman of the department of statistics when he was an assistant professor, which is quite a statement. Then he went on to the New York scene.

We knew a lot about him in New York. I was very impressed with his operation in New York. It's one of the reasons I came to thinking so highly of him. I was talking at that time with Herb Caen [San Francisco *Chronicle* columnist] and his legman. I said, "Gee, we know what we're doing." After Bowker's name was public, why, just look at his record on increasing the salary of the faculty at NYU. [chuckles] So they put it in Herb Caen's column, and I was in that column three or four or more--four or five times.

We brought Bowker here. Without question, in my mind, the best. The thing that you have to know about Bowker that very few people know about him--and he's almost a self-effacing person. Let me show you a couple of facets. He wrote a book on statistics, *Statistics for Science and Engineering*. It has been a best-seller ever since. It's still selling. It's revised, of course, constantly. But it's a fantastic book. How many people really know about that?

With him came Rosedith [pronounced Rose Edith], his wife, who was a professor of education down at Stanford, also a statistician. I remember talking with her on various problems

involving statistics and education and so on, and she was amazing, really good. She knew our faculty better than we did! The Stanford education department is considered number one still, probably. At that time, it certainly was. She took a job down there, rather than a position up here, because of the conflict of interest that might be looked upon. She was a great, great asset. Not that Roger Heyns's wife was not a great asset. But Roger Heyns's wife stayed in Berkeley. Was a wonderful hostess and the wife of the chancellor. So was Rosedith, but in a different way.

I don't think there existed at that time, and in many respects I don't think exists today, a person who could touch Al Bowker for his general overall knowledge of higher education in the United States. He always has maintained close contact with the New York scene and the Washington scene. When he left here, he lived in Bethesda, inside the Beltway, and worked with universities in Washington, D.C. The University of Maryland, as I recall. And then he went back to NYU and worked.

But he knew everything about higher education. He knew all the people in higher education. He knew the history of higher education. He knew--as he put it, when he was talking to me--he said, "You know, I don't bring any new ideas or any magic wand that says, 'This is what we should do.' What I bring is experience and the knowledge of experience of what will work and what won't work--what has been tried elsewhere and didn't work, and why." This was a fantastic reservoir of knowledge that he brought here, together with a sense of very high standards, which, of course, he got originally from Stanford and when he was first working at NYU.

You ask him a question, way out in left field, about some development in higher education, and he could tell you in detail what happened, why it happened, what went wrong if it went wrong, or what went right if it went right. He was just enormously gifted in this ability. He would get across his ideas very well.

I remember my first meeting with him. I thought, "Gee, I have to challenge this guy." So I said, "We have a system of higher education, and I'm sure you know--university, state college, and community colleges. For example, we have a lot of community college transfers. What is your thinking with regard to the transfer process?" Boy, he knew as much about it as I did, and I was already an award-winning expert on the transfer process.

##

Maslach: I was saying he was so knowledgeable in the community college transfer process. I was very impressed with what he was talking about. Already, he had learned during his visit and also in contact with people who were asking questions on the telephone--he knew a lot about the internal workings here of the Berkeley campus. He knew about the Academic Senate and its relationship, and he knew a lot of people on the Berkeley scene here.

Swent: Was the California Master Plan [for Higher Education] still an item of this time?

Maslach: That was it. That was basically shorthand for what we were talking about, the three levels of higher education and the transfer processes within them. He knew things about our admissions that I did not know. For example, years later, when I was quizzing him about some of these things, he pointed out that the number of people who applied--minus, of course, the people who were not qualified; minus the number of people who decided to go elsewhere--leaving the final number of people who came was exactly the number we needed to maintain a steady state. Now, this was a rare artificial, almost, consideration. In other words, we did not have in those early days, when Bowker came here, a need for turning people away. We had this perfect balance going on. It went on for two or three years, the first two or three years of his administration. Now we're turning away people by the thousands, tens of thousands. So he knew about our admissions situation.

He knew quite a bit about our budget situation. He was not walking in cold. His work down at Stanford, his knowledge of people at Stanford was amazing, and that helped immensely in this whole thing. He asked me a number of questions as well, and he also pointed out that he would set up a provost system, and he liked the concept of the provosts. He, of course, was the friend of a famous provost at Stanford, Terman. I was also a friend of Terman's, with time. I had known him already--had met him--but through Bowker I got to know him very, very well.

He talked about the provost system and how it worked in Stanford, and he also knew about the provost system at Berkeley under Monroe Deutsch in the thirties. I got some idea of how he planned to administer. As I said, I was impressed with his tremendous reservoir of knowledge and where we should be going. He was oriented academically, and he was already thinking of various things that might be done.

We all voted for him on the short list. We did give two or three other names on the total list to the regents. Of course, they interviewed. One of the great, great things in Bowker's



favor--I think he would have been appointed for other reasons, but the fact that he was a Stanford man and we had a quite a few Stanford regents on our--the number of Stanford people who were on our regential board was, of course, a big help to him.

### The Triple Mandate as Dean of Engineering Was Accomplished

Maslach: So he was appointed and came here. It was kind of a transition period. I have to kind of go back to my own thinking here. You have to remember that every ten years I wanted to do something different. I had been dean of engineering from '63. This was now '72, nine years. I was not footloose, but I could see that I had done everything that I had been asked to do. We were the number one college within the nation, in the best survey ever made. We were second, a very close second, to MIT on other surveys. Number three was Stanford. In time, they were all linked together as number one.

We put the undergraduate degree program on a four-year base, and we had the faculty of engineering dominating the chairmanships of all the committees in the Academic Senate. We were heavily, heavily involved in the academic administration of this campus. Those were the jobs that Ed Strong laid out for me. So I could now speak confidently with people about engineering coming of age, and it was this period when it did come of age. All those nasty little people who called it a trade school no longer talked that way. As I told you, people were calling me and asking me to get the vote out so the engineers would be at the Academic Senate meetings. We developed stability on the campus. Engineering was known for that. The quality of engineering was upgraded.

But I was, of course, getting antsy, I guess. The Washington scene had intrigued me, and then I had dropped that. But in certain respects, you have to kind of look at this and put age into the equation. In '72 I was fifty-two years old. If you look at careers of people, study biographies, people who stay in a public eye and public profession, or even privately, when they get to fifty, they've got time for one last hurrah, and so you're trying to decide what you want to do at this point.

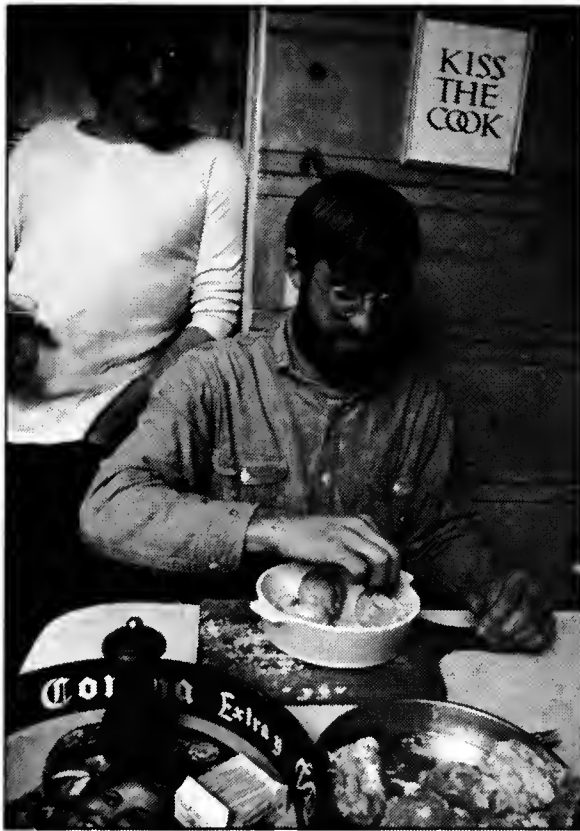
I had weaned myself away from the idea of doing something in Washington as a public service function. I was not casting about yet, but I was ready to be enticed, I guess is the way to say it. I could tell that I had served my function. I believed in my

ten-year concept, and somebody else should be the dean of engineering.

Mike O'Brien was civil engineering. John Whinnery was electrical engineering. I was mechanical engineering. In a certain way--not because it was traditional because those three people represented three different major functions of engineering--the concept of rotation of deans from other departments was in everybody's mind. We had candidates, obviously, from other departments who could take over the deanship, so I did not feel out of place.

I was most proud of the fact that I had gotten our record with the budget committee and the chancellor's office so high that people that we proposed were not automatically accepted but were accepted without big argument. We were getting 95 percent of our people approved, without any question. This permeated the department. We had done so many new things. Of course, with Lotfi Zadeh, we had made a big movement in development of computer sciences, so electrical engineering and computer sciences became a dominant department, not just within engineering but within the campus.

So I felt that it was time for me to go back to my research and teaching. In fact, I gave that very serious consideration. Chang Tien, who was chairman of mechanical engineering and later vice chancellor and then chancellor here, was eager for me to come back and work on revising a big course that I had worked in earlier. I was beginning to be kind of at loose ends. Of course, when you're getting up there, you realize your children are all in college or out of college. I'm looking, "Where do I go next?"



Steven Maslach and Jamie Maslach,  
artists in glass.



Doris Maslach at Steven's open house  
in Larkspur, California, 1971.





Visit of a scientific delegation from the People's Republic of China to the University of California, Berkeley. Luncheon, University House, December 14, 1972: Chalmers A. Johnson, Professor of Political Science and Chairman, Center for Chinese Studies; Chang Wen-yu, Deputy Director, Institute of Atomic Energy, Chinese Academy of Sciences; and George J. Maslach, Provost--Professional Schools and Colleges.

*Photo by U.C. Graphic Arts, Lawrence Berkeley Laboratory.*





Christina Maslach, Ph.D., Stanford University, with grandmothers Ruth Cuneo and Anna Maslach, June 1972.







Anna Maslach, circa 1972.





U.C. Deans of Engineering: George Maslach, Morrough P. O'Brien, Donald H. McLaughlin, John Whinnery, and Ernest Kuh, 1976.

*Photo by Russell Abraham.*





University of California delegation to the People's Republic of China, Beijing, 1979: George Maslach and Vice Premier Huang.



Doris and George Maslach on either side of Vice Premier Huang (center), Taiwan Room, Great Hall of the People.





George and Doris Maslach with Paul Gray, Dean of Engineering, at the UC Faculty Club, May 1998.

*Photo by Peg Skorpinski.*





## IX PROVOST FOR PROFESSIONAL SCHOOLS AND COLLEGES, 1972 TO 1981

Superdean to Represent the Chancellor's Office

Maslach: I was primed for when Bowker called me after becoming chancellor and asked me to come down and meet with him. He and I developed very quickly a close relationship. We would meet sometimes in the chancellor's office, but he knew better than that. He would have me meet over in the University House. If I walked through the chancellor's office to meet with the chancellor, that's a big signal to an awful lot of people, and the next thing you know, there are rumors all over campus. I knew that when I walked around within Engineering as dean.

So we would meet at University House.

Swent: That was his residence on the campus.

Maslach: His residence on the campus. We would have a drink and talk. He was always very forthcoming, very direct, very honest. He told it the way it was. He went into this provost position concept of his. He gave the Stanford example, and then he also pointed out that there was a need for two provosts, really, here on the Berkeley campus because there was a big difference between professional schools and colleges on the one hand, and L & S [Letters and Science] on the other hand. I knew a lot of that, and I had worked on a lot of that problem.

But he had it much more organized in his mind. First he discussed them in terms of the relationship of the provost to the deans of the schools and colleges. He said, "What I need here is a superdean who represents the chancellor's office concept, the budget." The thinking at the campus level--to get that down into the dean's level. He felt that the various mechanisms that had been used before had not been very useful for changing, and he felt that the professional schools and colleges needed a variety of changes.

He went through a number of these, and he felt that what I had done in engineering--I was the perfect person. He pointed out the School of Law is really kind of an entity to itself or likes to think of itself that way, and the College of Environmental Design is too small; they are quite inward-looking and so on, whereas Engineering--the work we had done, by Ed Strong's demand, to get involved in the Academic Senate, we were a really much more integrated operation than any of the other potential schools and colleges.

So he asked me to be provost of the professional schools and colleges. We got talking about this, and I wanted to know who was the other provost. The dean of L & S was Walter Knight. He had had a checkered career, I would say--a lot of victories, and he improved things in a variety of ways, but certain things he tried to get done didn't get done, so he was ready to quit as well.

#### Roderic Park, Provost for Letters and Science

Maslach: I'm a little vague as to if he actually retired--I think he did--from the position. The new man that came in was Rod Park, as dean of L & S. Split title: dean of L & S, provost of L & S. We were the two. Rod Park and I knew each other in a variety of ways. We had met in an academic sense, but we knew each other also because we were both members of the Richmond Yacht Club [chuckles]. He had been commodore out there at one time, for one year.

He was a very active racer and very active, especially in the Trans-Pac race. Not only raced his boats one after the other to Hawaii, but he raced single-handed on one of his boats from Los Angeles to Hawaii, and then came back single-handed. These are feats that you really cannot understand until you've sailed a lot on the ocean.

Swent: It's a very big ocean.

Maslach: Well, there was a wonderful joking comment made, "Are you really certain that you want to become an ocean racer? Do you really like ocean racing? Let me tell you what ocean racing is like. Ocean racing can be duplicated in the stall shower by turning on only cold water and you're dressed in a leaky set of oilskins, and your boots leak and everything else, and you have somebody in the shower beating you with a baseball bat while you tear up hundred dollar bills and stuff them down the drain." [laughter]

It is a very expensive operation, and it's a very demanding operation physically. It's tough. It really is a tough operation. I always admired Rod for many of these things. He was a true yachtsman, and he devoted himself. Very, very good, incidentally. His record proves that. I always remember when he came back from Hawaii, single-handed, I happened to be Saturday morning down at the yacht club, and lo and behold, I see his boat, which is a pretty obvious color. I said, "Rod's back."

I left my boat. Went back to the clubhouse and lo and behold, there's Rod Park. He looked pretty damn good. A little thinner. Well-tanned. We sat in the bar and drank some old coffee, as I remember--heated it up. And talked about the Trans-Pac race and coming back. The image I always retained is a wonderful one. The Farallon Islands outside the [Golden] Gate here is a marker, of course, for anybody returning because you have all kinds of navigational equipment on the Farallon Islands. I said, "How close did you make it to the Farallons?" He said, "I approached it--fog--and I knew I was fairly close."

This was before we had GPS [Global Positioning] systems, incidentally, which you could tell within a foot where you are. But he said, "There was a break in the fog, and there's Noonday Rock," which is one of the rocks to the north of the main Farallon Islands. He said, "I saw it. Went on the other tack and took down the big jib and put up the blade" (which is a small jib) "and just loafed around and went north, away from the islands, and just took it easy until the fog cleared, and then came in." He hit the Farallon Islands right on the nose! That's a navigation feat in itself. The casual way he did all of this, that was just wonderful.

We formed a good team. We had good respect for each other. We were knowledgeable of each other's position. We were knowledgeable of standards which we both held and our academic push. We really never, never had any dispute. We worked hand in glove in so many different ways. I'm talking big things, like space development, budget developments, academic department development--whatever it was, and this will come out as I discuss the provostship much more.

Swent: Were the number of faculty and/or students roughly the same in the two jurisdictions?

Maslach: Basically, the makeup of L & S is heavily--student credit hours is heavily undergraduate. Their graduate component is small. When you then look at the professional schools and colleges, their undergraduate component is small because we use L & S for a lot of our courses, especially math, chemistry, and physics--in

engineering, as an example, but also the social sciences, the humanities and so on.

But then when you get to upper division, especially, of course, graduate, we were all engineering. The graduate population on this campus is dominated, over 70 percent are graduate students in the professional schools and colleges. So you've got, say, 60 percent of the faculty in L & S, 40 percent in professional schools and colleges, which is a pretty close approximation. But the School of Law has one thousand law students, all graduate [students], and they take very little in L & S. It's almost all in law. Business administration has an undergraduate degree in business, but it's dominated by the School of Business Administration courses. The first two years are not, but--just like engineering--the first two years are heavy in L & S. The same thing pertains to the College of Environmental Design and, to a lesser degree, in the College of Natural Resources. So those are our big undergraduate-graduate overlaps.

We dominate on one side, and they dominate on the other. Basically, they have four colleges, and there were many attempts over many years to break L & S into four colleges and very wisely for the L & S position, they rejected that. Basically, they have a College of Physical Sciences, Biological Sciences, Social Sciences, and the Humanities, so those are the four groups. We'll get into that later on because we made together some major changes in the biological sciences.

I started kind of making up my mind, as I said. This was early on, so I had enough time to alert people in Engineering. I had already made my decision to change about a year before, when I became provost, so I had already alerted them to start search committees going.

I had a lot of people who didn't want me to leave Engineering, but I also had people who wanted me to leave Engineering and respected me for that. I remember a man was speaking to me when I first announced it. He was now a middle-aged Turk, not a young Turk [chuckles], but he thought it was a smart idea: we should develop a rotational concept.

If you really want to get into the technicality of it, there were deans who stayed on for ten, twenty years. Mike O'Brien did, and people like, oh, Social Welfare--

Swent: Chernin?

Maslach: Chernin, Dean [Milton] Chernin was there for over twenty years. So if you look at the *Academic Personnel Manual*, it says, Department chairmen shall serve for five years, and rotation is required. And it says for deans that they will serve for a period of seven years. This is a nominal period of seven years. Rotation not required. So a dean can stay on for a longer time, whereas chairmen--there are so many of them, you want to rotate them around anyway.

I felt [it was] time to leave. I had carried out these meetings with the total faculty, and we were a totally new faculty. I had constantly pushed for larger and larger numbers of faculty by getting students here. That had worked in the junior college level, especially, but also the freshman level as well. My books, like *Why Berkeley?*, brochures and whatnot--I had gone not to the engineering people, but I had gone to the advisors. I told you. One community college after another. Did all sorts of high schools. And just sat in the hallway with students, looking at the files.

I went down to Pasadena High School because it was such a good high school. I wanted to know why it was such a good high school. I talked to the principal and the advisors there, and I talked to students. Why do they go to Berkeley? And I really learned an awful lot by my traveling around.

So I felt that I had done my job. Getting into the provost position was a new problem. I had left the engineering college in good hands. Had good associate deans and good staff--Dave Brown and Rachael Stageberg. But then Rachael saw me taking off. She knew her way around, so she said she was going to leave, so she opted to go to systemwide and followed Frances Woertendyke down there, and was administrative assistant to one of the vice presidents. I've forgotten which one. But she didn't last there too long because she later answered an ad that I sent out. She applied for assistant to me, and so I--this was after I became provost, of course.

There was about a year there that we didn't see each other at all. I said, "What's with systemwide? Why don't you stay down there?" She said, "There was nothing to do down there." She wanted to do things. Working with me, she saw things getting done. She was in court, giving expert testimony and things like that. She would be representing us, engineering endowment systemwide, at meetings. She enjoyed that activity. Dave enjoyed that activity as well, but he saw where he was very valuable and necessary within engineering.

The problem I had, of course, was to start getting a staff down there in the chancellor's office, California Hall. I went down there and was shown where I was going to have my office. It was occupied by a professor from Natural Resources, Agriculture--Loy Sammett. He had, oddly, not a clearly defined position. I think you might say he was sort of vice chancellor for research, but there was another vice chancellor on the other side from the English Department, Jack Raleigh, who was vice chancellor of academic affairs. Through him went all of the cases for appointment, advancement, promotion.

Down the hallway, the second floor--this is California Hall --on the far north end was an area where we had all of the people who processed all these cases. I'll get into this because this became part of my job. I met with Mark Christensen, of course, who was Bowker's appointee as vice chancellor. Mark is a man who will forever look like a slightly aging teenager [chuckles]. Maybe that's a little--he looked like a graduate student. He looks constantly--okay, his hair is grey now, but I saw him not too long ago. God, this guy still looks like he's in his thirties, you know? At the most. He's a very boyish-looking fellow. And he has that personality. He came through the Academic Senate during our period of troubles to be a prominent member, with a good regard of the faculty. A professor of geology.

I saw what he did, and we had all these talks before, before I took the job. Of course, I talked with Rod and talked with other people down there and Raleigh and Loy Sammett and so on. Just as a little funny thing, because it's something I remember, Loy is not a very tall man. He died a few years ago. But I would place him about five-foot-seven, five-foot-eight--slight figure. I accepted the desk that he had there, and the chair.

#### Furnishing the Office for Comfort and Friendliness

Maslach: After a week or two, I was getting back pains I couldn't believe. I tried other chairs. Finally, I talked to the woman who was the office manager for the chancellor there. I said, "This chair is not large enough or something. I racked it up sort of high, but that doesn't do it." I said, "Who do we get our furniture from?" It was a standard company that makes all this stuff. I called up and said, "Here's my problem. Here's who I am."

"Oh, yes." The guy said, "Are you sitting on the chair now?"

I said, "Yes."

He says, "Get out of the chair. Turn it over, and read the number and letters on it." So I turned it over and read the numbers and letters. He says, "How tall are you?"

I said, "I'm six-foot-four. "

He says, "Oh, God. You've got the smallest chair that we make." [laughs] "That's for someone who's on the order of five-six to five-eight. What you need is--"

I said, "Can you come up here?"

##

Swent: So you ended up with a full-size chair.

Maslach: It's actually a chair that you see everywhere now. It was just getting popular at that time. It was a chair that came above my head--

Swent: An Eames chair?

Maslach: No. It wrapped around a certain amount beyond your shoulders, and it had armrests. You could lean back, of course, and all that stuff. But it was big. It was tall. It was very comfortable. You could actually go to sleep very easily. I always remember the office manager saying to me, "Oh, this is so expensive!" I said, "My back is more valuable than this chair." Within months, the chancellor, the vice chancellor, a number of other people--vice chancellor for finance--he had that chair. It cost that chancellor's office--budget--a lot of money by getting that equipment in there. I got a little cocktail table, round table, and a couch. It was all very nice.

It was so nice that the office manager agreed that we ought to repaint the office, so we did. It was a very horrible grayish-bluish color which I found very not only dull but dismal, and so we repainted it with basically the standard color scheme. You know, the paint companies have all this down cold. If you say, "I want beige," why, they just pull out the beige page and show you all the colors that go with that beige, and you should do this with the floor and this with that. I tried to make the office a little less of a bureaucratic cubicle.

I bought a very bright-colored, abstract Norwegian rug--gave it a feeling of festiveness. Covered that dark floor. I added another chair, easy chair. I arranged the furniture so that I

had the desk in a corner. Anybody visited me, I just would be in a conversation with them around a cocktail table. We would have coffee. I never, never, even as a dean, talked to anyone across a desk. I felt that that was really one of the most divisive techniques.

I was always very happy with Bowker's and also--remember I talked about Ed Strong. Roger Heyns, same thing. Always moved--comfortable--get away from the desk. But other people are so glued to that desk they cannot move from it. It's surprising that people still put that barrier between themselves and the public.

### Forming the College of Natural Resources

Maslach: So I kind of got things fixed up down there. I, of course, spent a lot of time talking with Bowker and with Mark [Christensen] [about what] the duties were and what they saw in the future. One of the first things I received--just to give the academic flavor to what a provost did--was I was handed a document by Bowker. Said, "Why don't you handle this? It was something I inherited." It was a report on the College of Agriculture and the School of Forestry, petitioning the chancellor to allow them to merge as a new College of Natural Resources. Well, I looked at it, and I was really surprised. I knew people down there. Here they had all signed off on this. I kind of wondered what I should be doing. I'm into a whole new framework here, a new academic level, another notch up. We're not talking departments and potential departments; we're talking about schools and colleges.

I did my usual: I refer to people I knew and start talking with experts. Downstairs in the basement of California Hall is the graduate division, and there was the dean of the graduate division, Sanford Elberg, "Sandy" Elberg. He had been dean for a little while. He was a wonderful, wonderful person. Still is. Last time I saw him, he was living up in the Clark Kerr complex. His wife had died a number of years ago. He has retired, of course, for years--as I was when I saw him.

But here was two big faculties with a lot of graduate work, and so I went to the graduate dean. We discussed it. He knew about the report because it had appeared before the Graduate Council and the Academic Senate, had been voted on, and the Graduate Council approved the merger. Well, I didn't even know about that. Bowker didn't know about that. So I hot-footed up



to Academic Senate offices. Of course, I knew the women there. I was always on very good terms with staff. Maslach's Law Number A, B, or C. All the top staff people, administrative assistants, and so on.

I copied the report of their approval and what they discussed and what they thought was right and what they thought was wrong--all these things that I would need. I then, of course, studied all of this and went down and checked out with the dean of forestry and the dean of agriculture and started talking with them. They are two sizeable units on campus. They are complex units because they have split appointments with the agriculture research operation, which is a totally separate budgeted unit. It gets its money through the state but from the federal government.

It comes from the Land Grant Act signed by Lincoln. This is how far back their ties to the academic goes. [The] Land Grant Act set up the concept of federal college of agriculture and mechanical arts, A & M. Mechanical arts was essentially, in those days, mechanical engineering, but it was College of Agriculture and College of Engineering. And very rapidly, because it was important, the College of Chemistry. These were the bedrock units of the campus. This was true within all of the United States. So we're dealing here with historical functions as well as very complex budgetary systems. They are eleven-month appointments down there because they do their field work during the summer. Take a semester off and transfer to this budget and that budget. I learned a lot.

Swent: Was there also a relationship with Davis that you had to--

Maslach: Oh, yes. This was true, of course, in areas other than agriculture and forestry. It was also true in the field of nutrition and some of the biosciences as well. But when the Kerr concept of the multi-campus university was developed, there were separations of units from Berkeley throughout the whole system. For example, few people realize but all of the work in the development of the grape industry, the wine business, was started here at Berkeley. Oenology, that field of wine-making, was the product of the work of the dean of agriculture down here. The man's name--name of the hall, that's one of the buildings [Hilgard Hall]--agriculture complex. But all the technology was moved to Davis. Of course, that's one of their biggest achievements up there. But for many, many years this was all done down here. Grapes in Berkeley. Wines in Berkeley.

But forestry was a school with a great reputation, one of the top if not the number one school of forestry, and there are

not too many in the United States. The Forest Products Laboratory was already established out at the field station. It was one of three or four within the United States, doing a great deal of work, in collaboration with industry.

### Building a Staff

Maslach: So here's my first entrance into the field of what we're going to do in the professional schools and colleges. I advertised for people. I got Rachael Stageberg as an assistant. She, of course, just helped me enormously because she was, first, knowledgeable of me and I of her, and we just did not have to spend much time with each other. Then I had a wonderful secretary. She only lasted for a short time because she got married and went up to live in Paradise, California, with her husband, who was a graduate. They were very active in sports, selling sports equipment. They, themselves, were big sports people.

Swent: What was her name? Do you remember?

Maslach: [no audible response]

Swent: We'll get it later. That's okay.

Maslach: I wish Rachael were here, alive. She could tell all these names. The first secretary I had, an Asian woman--she was very forthright and told me that here's what she expected. I was taken with this wonderful ability of hers to state her career. She felt this was a turmoil period and what's in it for her. She kind of gave her conditions, reminiscent of Rachael giving me her conditions when I became dean of engineering. I said, "Gee, maybe we have a mismatch here." One of the things was she did not want to take dictation. I was very surprised at that. She was very good at it, but she felt that she had to move up, and one of the things was to stop typing or stop taking dictation. She was very future-oriented, and rightly so. I mean, I'm not against her, but really I understood her and I appreciated her.

We worked on finding her a position that she wanted. That's really what she wanted. She had been in kind of a dead-end position there, and she had no supervisory direction or help. And so she found a position in one of the departments. That's when I found my second one, who I'm quite sure was named Elizabeth. But then, after she left, why, April Roy became my secretary and later became my administrative assistant.

April Roy, Secretary and Administrative Assistant

Maslach: April Roy was a wonderful--still is--person. I guess I'm attracted to people, all of these people--David Brown, Rachael, April--because they're people like me. They're ready to work, take a job and do something. They are forthright, and they don't mince around. If you're wrong, they tell you you're wrong [chuckles]. April Roy was a black woman, very active in music in her church. She sang, played the piano and organ, and she composed soul music. Later on in her career, she very quickly latched onto computers and became truly a computer expert for people in the secretarial-clerical role. She was taken from me by the head of the computer center, to do this work campus-wide. She was a great teacher of the computer and how to use it, for staff--secretaries, typist clerks, and so on.

You know, computers totally wiped away the concept of a secretary. We just don't do that any more. She understood this better than anybody I have ever known, better even than the man who hired her--the computer center director. Even the person from IBM who gave us this big contract when I was provost--PROFS, P-R-O-F-S--that was the name of the research program. It had nothing to do with professors. It was really professionals. This was an acronym for this research program, to see how to use a computer within an academic system. We picked up fifteen million dollars' worth of equipment and expertise from IBM. This is something I'll get into in the development of the provost work.

So I could see my way clear on academic features. I was knowledgeable of academic changes and so on, and I knew the proper people to go to--Dean Elberg and so on. I knew the people who were the deans down there in agriculture and forestry, so I just spent--half my time outside of my office, down there, talking to this group, that group, making sure that they really knew what they were getting into.

Doing away with an academic department or school or a college is a big thing. We might want to go back to--well, it's even bigger trying to go back. You don't give up a degree function or you don't give up something because it may well disappear forever. I knew this; I was very sensitive to this because I was the guy who signed off on the College of Mining. Not the college, but the Department of Mining, excuse me. Mining academic program. I did away with it.

But I also signed off on being dean of Davis engineering, which it was, unbeknownst to me for the first few months when I

was dean at Berkeley. So I kind of knew some of the ins and outs of this thing.

Getting back to your question, which we've kind of skirted around, lots of things at Davis came from Berkeley--not just engineering, not just agriculture--a lot of agriculture stuff--nutrition science, one of their best departments up there, came from Berkeley. But they also picked up other things. For example, if you look at botany, they were always strong in botany at Davis, but they picked up certain things from Berkeley. This flow to Davis was substantial.

The biggest flow up from the Berkeley campus, of course, was in the professional schools and colleges before I became provost, when no longer was medicine taught at Berkeley but all of the first two years of an M.D. degree was taught here, or at least the first year--the basic sciences and biological sciences. Later chancellors at San Francisco told me it was a big mistake to move away from the Berkeley campus. M.D. degrees, through, oh, say the sixties, when the big change with Kerr occurred, was an M.D. from the University of California at Berkeley and San Francisco, so we had joint campus degrees worked out.

I also kind of came into the provostship with another concept, and that is that just like that M.D. degree I was just talking about, which was before my time, but when we changed over to the quarter system, we changed a lot of things, such as getting unit credit for courses that you could take in engineering if you were in L & S.

One day late in my career in the deanship of engineering, I'm sitting in the office, and my secretary [Lynn Davidson] came in and said, "There's a student on the line from mathematics. He really wants to talk to you. He wants to set up an appointment, but he would like to tell you something or check something out with you before he does it."

So I said, "Sure," so I got on the line, and this student of mathematics kind of tippy-toed around the subject matter, but I said, "Wait a while. Let me see if I'm hearing you correctly. What you're telling me is that you, a student that I have never seen in mathematics, probably has enough course credits in engineering to be able to graduate from Berkeley with both a bachelor's degree in mathematics and a bachelor's degree in engineering."

He says, "That's right. You got right to it." He says, "Is that possible?"

I said, "You know, I don't know. I'll have to look it up. I'll have to look at it." I told him where I was located.

He said, "There's a bunch of us, about four or five of us, who are in the same boat."

I said, "How did you ever get into this?"

"Well," he said, "we're taking more than four years, and we didn't know what we wanted to do. In the undergraduate L & S program the first two years, we were undeclared majors. We have taken five years to get our degree because we didn't make up our mind about what we wanted to have a major in. A lot of us took courses in engineering--so we had a background there and also in physics--physics and courses within L & S. So now that we can take credit for these courses that we took in engineering, which before we could not get credit for, we were wondering do we qualify as a student in another college?"

That was a fundamental question being raised by an undergraduate student, a senior. I got into it by first finding out who was in charge, who knows about this stuff. Well, there's a little-known committee of the Academic Senate which is a committee on graduation. The professor in charge of that committee, the chairman of it, was a good friend of mine. He used to sit and watch the hearts game every once in a while. His name was Isidor Perelman. He was a professor of chemistry.

I said, "Hey, I've got a question for you as your job as chairman of the committee on graduation." I just over the phone told him what the problem was.

He said, "We're kind of aware of the problem, but we don't talk about it." [chuckles]

I said, "Has it arisen?"

He said, "Not really. Every once in a while it arises, but," he said, "you had a student not too long ago that came up."

I said, "Oh, yes, I did." We talked about it. I said, "What do we do?"

He says, "Why don't you come to meet with the committee?"

To finish up on the double-degree thing, it turns out that if you're very sharp students and read that little book, which is the manual you read of all the courses and all the schools and colleges, true enough, you could have two degrees when you

graduate. It takes more time usually, but put it this way: If you take all of your elective units from one college in another college and thus those elective units in that other college satisfy all of the degree requirements of the required courses in that college, then you have satisfied those two requirements--the degree courses in your college, which you normally are taking, and all of the degree courses in the other college by use of the electives.

The thing that sprung this all loose was when I was dean of engineering--I told you earlier--when I met with the College of L & S people, telling them I could not understand why their students could not take courses for credit in engineering. That was changed when we went to the quarter system. A lot of things have changed quietly in the system.

But I did pick up on this guy. Here he was, a student, telling me, "Hey, is this possible?" Sure enough, it was possible. So I worked with the committee on graduation matters and stuff like that. It's a long process through the Academic Senate because other committees--undergraduate affairs, which is the key committee in the undergraduate field within the Academic Senate--they had to pass on it.

I ended up, from that point in engineering, looking at this from the standpoint of departments, and helping departments--for example, materials science and mineral technology didn't have enough undergraduate load--how to get more undergraduate load with this kind of split degree program. So I was doing what that math student did, but I was doing it all within the College of Engineering. How about a degree in mechanical engineering plus a degree in metallurgy? Do you follow me?

Swent: Yes.

Maslach: Two different departments: mechanical, electrical--easy. Mechanical, civil, and so on. Those don't need the additional undergraduate activity, but the smaller departments--like nuclear, industrial, materials--combined the degrees. And those combined degrees worked out within engineering. Now, here I was, working with combined degrees between schools and colleges. That led me into the College of Agriculture, Forestry--in which they had to do combined degrees. I was getting to a new plateau of thinking. I mean, my thinking was not simply professional schools and colleges. I was going across lines. I had a lot of things to talk about with Rod Park and, of course, with Al Bowker.

But I'm trying to give you the new philosophical way of operating.

Swent: Women's Studies came in at some point.

Maslach: Oh, yes. That came later.

Swent: Was that later?

Maslach: Yes.

Swent: You were instrumental in that, I understand.

Maslach: Oh, yes. I started getting heavily involved in new academic affairs, at a new level. One day, totally unbeknownst to us--we were meeting in cabinet session, and I had best describe what a cabinet was. Bowker had told me very early that he liked to work with about seven people, no more. These big council meetings--council of deans is one; twenty-three people. The dean's conference room is big enough, but that's not his style. So he selected his cabinet: of course, himself, the vice chancellor, the vice chancellor for financial matters and the two provosts; there's five. And then they had the dean of the graduate division, and the dean of student affairs. That's seven people. He would have the budget man, Mauchlan, sit in, so you could say there were eight people in total. But that was it.

That meant that a table three times as long as this one would not be filled but it would be the chancellor, where you're sitting, and four people--three people on--that's it. You could talk. It was easy. Everybody knew each other. Everything was fine.

#### The Academic Senate Does Away with the School of Criminology

Maslach: One day, we broke up--we met between eleven and twelve, I remember--Sandy and I were standing, and Sandy said to me, as provost--he said, "The Graduate Council report on [the] School of Criminology is coming out. It'll be out this week."

I said, "Oh. Do I get a copy?"

"Sure."

I said, "Fine."

Bowker is standing there. He says, "What does this report say?"

Sandy is a short man--Al and I are six foot and six-foot-four, and so we're looking down at Sandy. He kind of pulls himself up to his full height, and he says, "They think we should do away with it."

It was the first time Bowker and I had heard this. It was an academic, separate part of the system, saying they're not doing their job academically. I want this to be underlined in the oral history because for so many years during the period that we did away with it, everybody was screaming that it was Bowker who wanted to do away with it, that it was I that wanted to do away with it and so on--all kinds of innuendos. The system wanted to do away with this. The Regents wanted to do away with it. Everybody but the fact that the Academic Senate, in its review of its units, came up with the decision it should be done away with. It rarely comes up with that decision, but it has done that on a number of occasions historically.

I was suddenly immersed into the problem of doing away with an active School of Criminology, about a dozen faculty. A fair percentage of them were lecturers. A number were assistant professors. Not too many at the tenure level. A couple of split appointments--one with law, maybe two of them with law. With an assistant professor, whose name went down in history, Tony Platt. This is something that we're going to be going into next time. It took about two years of my life to do away with the school, a program. A number of assistant professors and lecturers leaving and transferring to FTE or to other units with [the] campus. But the program was essentially wiped out.

I'm trying to give you the kind of environment that I'm walking into as a provost. Just within weeks and months, I'm reorganizing a couple of things over there and over here I'm doing away with--Sandy Elberg--he said it very well. He said, "You know, these academic reviews are very much like a major surgical operation. You've got this big body on this gurney, and [you're] all cutting inside there, trying to find out what's going on and finding out what the health or the non-health--"

##

--finding out what the health or the non-health of the organization is. And so it's a bloody mess. He says, "A lot is going on." We have to disassemble everything and look at everything and see if it works or is not working.



Swent: How often did they do this?

Maslach: Well, I'll get into that how long--but he said, What we do is we put everything back together and assemble it and everything, and the patient recovers--or maybe not recover, in this case--but the patient usually recovers. And usually, during the process of examination, everybody in the organization is getting the word of what's weak, what's good, what's bad, and so on. And almost all of the recommendations that we make are of a positive nature, saying this should be done or that should be done in this new organization, continuing organization. It's not very traumatic. But it was, in this case, so bad that we recommend doing away with the unit.

The review of undergraduate curricula is carried under the jurisdiction of the Committee on Undergraduate Affairs of the Academic Senate, and the review of the graduate degree programs is carried under the Graduate Council's overview. The graduate dean is the official established by the Graduate Council and the Academic Senate to carry out this work and to maintain overview of all graduate students on this campus.

Now, if you have about, oh, let's say eighty departments on the campus. Each one has a program, and a lot of them have graduate programs. But they often combine with others--literature and so on. You're talking reviewing a hundred-plus programs. You can only do ten, fifteen a year. Therefore, a ten-year period to review before you come around to a program again, is about the time, about every ten years, okay?

It's a bloody mess, as Sandy said, but it's the only way the Academic Senate--the faculty, which is the university, can make sure that each individual unit is up to its standards.

Swent: Is each unit reviewed by people within its own--

Maslach: Oh, no, no. The committee appoints a committee--this will be a committee that represents this unit. It also represents disciplines that are neighbors to it. It's a peer review by a group which is dominated by people outside of your unit. The only reason for having people within the unit on that committee is to get detailed information, but in general you don't like to have people put in that embarrassing position. So quite often the committees are faculty totally outside, but neighbors, very close. If engineering were to be reviewed, you would expect to have people from chemistry, math, physics, business administration, law, some people from L & S--mathematics, of course.

I think that we're at a point where we ought to be stopping.

Swent: It has been a long session.

Maslach: We're going to get into criminology and other much less organizational operations and introduce other activities the chancellor gave to me because when I organized the office, I had basically a council of deans from the graduate schools and colleges, but in time, step by step, which I will tell, I had overview of the office within the chancellor's office for academic affairs; namely, all the paperwork for appointments, advancements, procedures for faculty appointments and advancements.

And I got heavily involved, with time, in rewriting big sections of the *Academic Personnel Manual*, which is the bible for all of us on all campuses. I, more than anyone else universitywide, rewrote sections of this manual.

Later on, when we get into the vice chancellorship, all libraries reported to me, and the computer center, which is a delightful little story, taking over all computers. So I think, it's a good time, we're going to say goodbye for today. See you next time.

Swent: This has been a good, long session.

#### More Recollections of Nobelists Seaborg and Segrè

[Interview 10: March 18, 1999] ##

Swent: Continuing the interview with George Maslach. This is March 18th, 1999, and we have moved to a study room in the Doe Library.

When we stopped last time, you had just begun to mention about closing down the School of Criminology.

Maslach: I would like to start off, actually, with a couple of recollections because my mind clicked into gear after our last session.

Swent: That always happens.

Maslach: I suddenly remembered a couple of incidents. Won't take long to describe. You asked at the beginning of our last session about Nobel Prize winners. You especially remarked about social

activity. I realized that my contact with all these Nobel Prize winners over the years has been personal, but within the limits basically of the campus. While there are many, quote, "social," unquote, contacts, primarily at the Faculty Club, I never interpreted social in that way. I thought you meant more do we have dinners at home and stuff like that.

It turns out that a few years ago the faculty who got Nobel Prizes were people that we actually did see each other in a quasi-social way, if I can put it that way. For example, Glenn Seaborg. I always remember when I really got to know him, when he came back from the AEC [Atomic Energy Commission], he wrote a book, *Kennedy, Khrushchev, and the Test Ban Treaty*. He sent me a copy of it simply because we got talking about various things in our meetings at lunchtime in the Faculty Club. I didn't even know that he had written such a book. It's a marvelous book about history of the test ban treaty development and so on. To have him send me an autographed copy of the book was, I thought, a very, very personal thing.

Swent: Yes, indeed.

Maslach: One of the other Nobel Prize winners with whom I had contact in a social sense was Emilio Segrè. Emilio won the Nobel Prize with Owen Chamberlain. Emilio came from Italy, obviously. He was a professor at Palermo, Sicily. He was a very quiet person and one who I don't think made friends very easily, but for some reason, the way I pronounced his name was so Italian that he would ask Italian people to come over and listen to me when I said his name.

We got to know each other, and I asked his advice on various things, one of them being where to stay in Rome with my family when I went on sabbatical leave. He came with a list of all kinds of places in Italy where we should visit and stay. In Rome--we were there during Easter week. He put us up--not put us up, but he recommended the Pensione Paisiello, which is a residence turned into a pension in a residential area right on the Borghese Gardens. It was just wonderful. The kids--aged eight, ten, and twelve--had this enormous lawn and the zoo and the boat and the botanical gardens right outside their door. We didn't have to worry about going out to restaurants. We had wonderful food, and the prices were very, very reasonable.

We went to several places that he proposed. His family, the Segrè family, were big on paper making. They were probably the number-one paper producers in Italy at the time. They took the water from the river just below Hadrian's villa, which is just east of Rome. I remember driving down that road just simply

because that's the main highway to go there. You could see the pollution of the river after the paper factory.

One little-known fact about Segrè is that he is Jewish, or was Jewish. His mother was Jewish; his father was Italian, an industrialist. When he was buried up near the Lafayette Reservoir, it's just a simple stone block: Emilio Segrè, Physicist--and then the star of David--and that's the only thing there. Very simple. Obviously, a very dramatic kind of a place to be buried, and very dramatic stone.

His son, a professor of English, does work such as we're now doing--oral histories and so on. He writes on the history of technology. He wrote a book called *Atomic Bombs and Eskimo Kisses*--Eskimo kisses, the touching of noses. That's what his father would do when they were having play time. The book reveals that the son simply never, never understood the father, the fact that the Jewish background, the period in Europe at that time, the migration to a strange land--the whole process of being extraordinarily secretive because of the atomic bomb project and living in Los Alamos. That's where the son was born. It was not a normal life, but unfortunately, the son never seemed to understand his father.

### Living with Security Clearances

Maslach: It's a book that's very troubling to me. I could sort of be sympathetic to Emilio because I know what you have to do when you're under security clearance. You don't talk. You don't talk to your wife, you don't talk to anybody, and you get into the habit of just not talking. It's a security thing within yourself. The easiest way to be sure you're not talking.

Swent: Did you have that experience?

Maslach: Oh, yes. I talked more often. I would discipline myself, but when it came to anything that came close to security affairs, why, I did clam up pretty good. Then what happens is you get tense and you just clam up, and you just don't say anything. It was part of my life. That's all. And since we knew people in the atomic business and all the people in our radar business, why, this wasn't much of a hindrance. I could work around it. But I had security clearance through Secret and Top Secret a couple of times, and then a P clearance for the atomic energy work. I had security coming out of my ears. I had a registered office with a locked file cabinet and so on. Had to be a special

locking system. I was happy when a lot of that vanished. It vanished essentially at the end of my deanship, and I was no longer into that security business. Got rid of all my classified files.

### Charles and Frances Townes

Maslach: The third Nobel Prize winner that we actually still are quite close to is Charlie [Charles] Townes and his wife, Frances. Doris and Frances see or talk to each other quite a bit because they both have been involved with People's Park problems--Doris for years on a committee within the university, and Frances on a committee which involves a group of churches in the area. So we see each other. We've been to their house; they've been to ours. Stuff like that. Charlie, as you may recall--we talked about this earlier--I was instrumental in bringing him here to Berkeley when MIT was going to appoint a new president and he was not the one that was appointed.

So the contact with Nobel Prize winners was more than just superficial shaking hands and congratulating the people. It was kind of fun to meet these people. It's amazing how many of them --and other people, such as John Whinnery--were so active also in the Washington scene. If you read the citations for the National Medal of Merit for both Townes and Whinnery, it's amazing how many major decisions they have been involved in with the United States government. This Washington scene got to be part of everybody's life.

Swent: I think that's what that *Look* article brought out. I had time to reread that. The new elite were these jet-age professors. This was a new development, wasn't it?

Maslach: Oh, yes, it really was. If you recall, I also spoke of my political involvement in the Vietnam War treaty process. I think I mentioned that the vice president told me--told us, actually--that President Johnson has completely isolated himself from everybody, including the military, which he had totally endorsed. He was looking to scientists and engineers for advice. That's the last group he had confidence in. It was kind of a strange period. You walked into things, not even knowing what was going to happen. I could still remember that flight home from that meeting, that set of meetings. I was just numb. I couldn't believe what was happening.

So much for that.

### The Faculty Club Hearts Table

Swent: I have a question about the hearts table, which appears so often in our discussions. The hearts table--we've never said exactly where it is--it's at the end of the bar area there in the Faculty Club. Were you eating and drinking there too? Did you only play hearts?

Maslach: No. Actually, there was a period of time when the card games and other games were prominent. In the Faculty Club, for example, if you look at the south dining room, you'll notice what is left of a mural all around the top edges. You have all of these women in flowing robes, holding colored balls, which are actually billiard balls, and playing with them by rolling them on the grass. That was the billiard room. Four tables. That was quite busy in the old days. Finally, they moved billiards downstairs, and they had two tables. Once it was moved, why, that was the end of it. It was never used again.

Next to the billiard room, west, is a lounge area. That room was for cards. Kind of connecting doorway to the billiard room. People played hearts, they played bridge, but they also played cribbage, and they also played dominoes.

Swent: You mentioned that.

Maslach: You could have, oh, a couple of bridge tables and a couple of hearts tables and a couple of other tables as well going on. It was not a bar then. Of course, this was all during a period of time when the Faculty Club did not have a liquor license. Drinking, even after we had a liquor license, was never part of the playing of cards. It was more of a relaxation process--a lot of hilarity and joking and needling and what have you.

Swent: Was there a particular time for it?

Maslach: Yes. The hard-core people, the senior people who played--Latimer and--in geology; I'll think of his name--two or three. They would get there before twelve o'clock and sit down, and whoever came in filled it out, and then, why, you would sit at another table if you got more than four people. Latimer was sort of the center of the game, the dominant figure, in the period up until he died, which is seventies. The geology professor's name is Hinds, H-i-n-d-s. He was, oh, a character type. He used to be flamboyant. Quite a flamboyant lecturer, as well.

Other people. Charlie Tobias was dominant after Latimer. Werner Goldsmith was there from engineering. In chemistry there

was a large number of people that came. I can't remember them all right now. Sam Markowitz and Bill Jolly still play. Gene Petersen is also still playing. But the combination of engineering and chemistry were the primary people. It has been kind of a fun game. It's very good, as I said, because you can get to know people at a, quote, "social" level, unquote.

Incidentally, just as a footnote, I did not recall the name of the professor of statistics on the search committee, which we discussed last time. His name is David Blackwell. He has been called the best statistician of the century. He's quite a man.

Swent: Should we move on, then--

Maslach: To criminology?

Swent: Right.

Maslach: Yes. The point that I wanted to make in this statement about criminology is that everybody thought that this was a vendetta carried out by Bowker and later myself to get rid of the School of Criminology, but actually the Academic Senate, in their review, the Graduate Council, came up with a report--which is still available, if anybody wanted to go to the Senate offices and find it. The review report stated very, very strongly that the School of Criminology was not pursuing the goals that were laid out for it when it was first established. This was especially true with regard to degree structure and types of graduate degrees. This was a review by the Graduate Council. It's a graduate school activity they were supposed to be pursuing.

When that came to our office, it was a bit of a bombshell. We started looking at it and reviewing it. It turns out that the School of Criminology at that time had very few permanent faculty with tenure. There were some assistant professors, and there were others at the tenure level who had joint appointments with, say, law. Therefore, if we did away with the school, there were very few people--faculty people, that is--that would be hurt by the whole thing.

We consulted, of course, with the dean of the graduate division and with the Graduate Council and members of its committee and the review committee, and we also had some external reviews from experts in the field of criminology. The decision was made to just do away with it.

Swent: Were those courses folded into some other areas?

Maslach: Actually, the people with split appointments, especially in law, moved their course work over into law. There was joint participation by students in law. Criminology as a name disappeared, but to a certain degree some work was folded into the area of what is called jurisprudence. I think that that is in certain ways more what was appropriate for this campus. The professional school work that they tried to carry on just simply wasn't there.

### A Disrupting Lawsuit is Brought Over Denial of Tenure

Maslach: It was not a major upheaval, but this was the period of protests, of course. There were protests made, but nothing of any major disruption. The major disruption occurred because an assistant professor by the name of Tony Platt--I just suddenly realized you had better check that name, I'm pretty sure I've got it right, Platt, not Pratt. But that ought to be checked. He was up for tenure just during this whole period of being at sixes and sevens. He was up for tenure just when Heyns had his heart attack. Everything was delayed for a year, and the whole process--go through the review, the budget committee, and so on--was then carried out.

I was heavily involved. This is, again, a security problem because it's something I should not be talking about in terms of personal effects. But the budget committee had its view, and the review committee had its view. The end point was that there was no strong support for tenure in the process, and so the chancellor has the non-delegatable authority to make a decision. His decision was that we should not move Platt to tenure.

Platt took it to court. First, of course, he took it to the Academic Senate Privilege and Tenure Committee, and they investigated and found that he had no case, so then--he had to do that, incidentally, first, before he took it to court. Then he went through Superior Court and went on appeal. Went to Court of Appeals, statewide, which has three judges. They said that everything was fine and just remanded it back to the Superior Court. He, in his appeal, wanted to go to the Supreme Court, claiming unconstitutional First Amendment right violations.

It took essentially a year out of my nighttime life. We met with him. He acted as his own attorney. He had a background in law, but he did not pass the bar in California, so he could not practice law. But the attorney for the regents and I would sit down just night after night after night and just, like, every



week for a year. I went to the courts, and I went and listened. I was asked to do this by Bowker because it was a potentially explosive situation. The final decision was upheld, all the way through. He left and practiced teaching elsewhere. He still is involved in activist issues. You see his name, oh, maybe once a year or two, twice a year, in the San Francisco Bay Area.

Swent: I think you, yourself, said that you're sometimes known as a "hatchet man." This must have been one of the things that contributed to that reputation.

Maslach: Oh, yes. The thing about being a hatchet man is that you're going to make enemies if you're in administration. It's impossible. You cannot satisfy everyone. You have to set your standards and goals and live up to them; otherwise, you can't live with yourself, much less your family. I was known as the man who did away with mining when I was dean of engineering. I got a lot of flak from that. Of course, I was known--being on the committee that said don't build the SSTs, so the whole aircraft industry got on my back there.

The criminology issue. As I said, as a school, very few people were hurt; in other words, tenured people who had split appointments, just got full appointments elsewhere, so there was really not a major problem except for assistant professors, who were terminated.

So the case of Platt was kind of low-key. In that sense, it was more of an intellectual argument than anything else. Oh, I guess I was known for that process. But there are many other things that were occurring at that time.

#### Implementing Affirmative Action in 1972-1973

Maslach: One of the biggest things that occurred at that time was--early on, incidentally; that means around '72, '73--we were under the whip of the Office of Civil Rights on affirmative action. This is very strange, if we want to kind of go through this. If a campus--Berkeley or Stanford--has the majority of its research work funded by technical agencies such as the Office of Naval Research, then the review of the campus for affirmative action, etc., accounting, financial accounting is carried out through that science-based operation within the federal government. For many years, we were reviewed by the Office of Naval Research.

When more than 50 percent of the money to the campus comes from other agencies, such as HEW or Public Health or a variety of nonphysical science operations, then the reviews and the accounting is carried out through HEW. The Office of Civil Rights was located in HEW (Health, Education and Welfare). I was asked by Mark Christensen just casually one day to sit in on the meeting with the OC--Office of Civil Rights people who were there, in the main conference room, the chancellor's conference room in California Hall.

He said, "Nothing much is going to be done. We're going to be discussing this. I have to be at another meeting. Can you sit in?"

I said, "Sure." So I sat in. I was appalled. I was appalled first by the concepts that people had on affirmative action from the Office of Civil Rights, and I was also appalled by the fact that there were offices within the campus who really didn't even think about affirmative action, civil rights, and they were quite arrogant about it as well.

Nobody had the black hat. Everybody was at fault in some ways. After sitting in on it that afternoon, why, I saw Mark the next day. I said, "Mark, this is a big, big problem. We've got to gear up. They can really shut us down and cut off the money flow from Washington, D.C. I really mean this." I explained it all to him. We had at that time a young woman who was sort of legal advisor. She sort of operated with no real status within the system because the regents had control of the legal operations of the university, and everything was under the Office of the President. She sat in on it with me and discussed it. She agreed things had to be done. This could not be done casually.

I always remember working at that point with affirmative action. The reason I was chosen was not that I wanted to but that I had the nominal supervision of the academic personnel office in the chancellor's office. This is the processing of all appointments and promotions for faculty. I just sat and thought it through myself, and then I sat down with a couple of people that I truly respected--one being Rachael Stageberg, who was my assistant. This was just perfect for her because it was a big writing project, and she was truly a professional writer/editor. She and the head of the academic personnel office--and I'll think of that name, too, in a moment--Edith Scovill--started. She was the first. And then later, another woman, when Edith Scovill retired.

A Major Civil Rights Report "Smothering Them with Numbers"

Maslach: This conglomerate of the four of us--Rachael and I in my office, and the two people in the academic personnel office--put together a report to the Office of Civil Rights which in its finality was eight inches tall, four sections, each quarter. We, as Bowker once put it, just smothered them with numbers. We gave the background history on everything that we had in our files.

The affirmative action process is one which has great historical problems associated with it--the biggest thing being the G.I. Bill [National Servicemen's Readjustment Act of 1944], which brought all of these soldiers back into the university, and there was no room for women. The number of Ph.D.s for women just plummeted during the post war period--it was up high during the war years, and then it just plummeted just after World War II. These were the people we were hiring. The percentage of women, when you compared it to ten years earlier--how come? You're obviously in violation.

Well, it wasn't our violation. It was the legal thing passed by Congress. It was often to be discussed on a very high intellectual level, but it got down into very, very minor, pedestrian discussions--a lot of accusations with no evidence, so we got the evidence. We got all the numbers. These reports came out--the last one was issued on September 1, when Michael Heyman came into the office as vice chancellor.

We, upon completion of that report, were taken off the list of violating institutions and we were no longer an endangered species within the academic world. Harvard and other major universities on the East Coast--Harvard especially--just had a sweetheart contract with their reviewing bodies, which were from scientific agencies. Stanford was reviewed by a scientific agency, the Office of Naval Research. They were never in any major trouble. And yet there was no difference in the record of all of these major universities.

Swent: The difference was in the reviewing--

Maslach: In the reviewing body. The one thing I always remembered to sort of identify the tone of this group--this is the Office of Civil Rights--

##

Maslach: We had a meeting, one of many in the chancellor's conference room. The young woman who was the chair--extraordinarily gifted

and talented, very nice--and we were making good progress on things. At one point, there was a young man about the age of a sophomore in college, it seemed to me. He was adamant and vitriolic. He just was adversarial, just pounding me, especially. Finally, I said, "You keep telling me that there are so many simple ways of increasing minority faculty on this campus. Just give me one example."

He drew himself up very proudly, and he gave this example. He said, "You have a music department."

I said, "Yes."

He said, "All you have to do is to concentrate on jazz and teach jazz. You'll have to hire black people because they're the only ones who know about jazz."

I said, "That's your solution for affirmative action? You change the entire curriculum of the university?" He shut up.

The chair, the young woman, said, "We'll just forget about that. That's off the record." It wasn't, because it was all recorded. "Just forget we ever said that." She was very angry with this young man on her staff.

This was the mentality, to change the curriculum. The law says there's no way you change the curriculum to achieve these goals. We just had this intellectual problem with the whole process. Fortunately, by drowning them with numbers--and they were honest numbers; we just showed what we had done over the years. Then we set up a system of what we were going to do to review all appointments for assistant professor or tenured [professors], on affirmative action.

Anne Wright and Nancy Lankhammer at that time, of the chancellor's office, budget office, put together, with me, a system. We used green paper, green cards. Basically, you went through the process of telling why you--this is where that great word came from--"deselected" people. You have a list of the people that you searched for and found and interviewed. You had one assistant professorship that's going to come out of that. You did not choose this person for that reason, and this person for that reason, and so on, and finally you end up with the person you chose.

The deselection validation was done using these green sheets. We set up this process. Every department chairman, dean, etc., had to go through it. It was a time-consuming, laborious thing, but everybody understood what the problem was.

For a period there, I felt very proud of Rod Park and me. We were the two provosts, and we really believed in affirmative action, and we really put the screws on people on the appointments. If a dean sent through a case without the "greenies," why, it was sent back with no comment, just sent back. It was incomplete.

A Time-Consuming but Effective Process Achieved 27 Percent Minority Hires

Maslach: People had to go through the process. It was, as I said, time-consuming, but it was also very, very effective. The number of appointments--let's take women--was about 10 percent of all appointments. That was about roughly what the Ph.D. output was nationwide, in a big sense. You've got to watch yourself here because if you take Ph.D.s in education, the number is much higher than 10 percent, but if you take engineering or physics, it's much lower. I guess there's a general number to show what we did. Ten percent was sort of an index of what had happened several years ahead of time.

When we were requiring this affirmative action, that number jumped to 27 percent.

Swent: Very dramatic.

Maslach: Yes. I remember Rod and me sitting down in his office one day. I said, "We're leaders. We're turning out more Ph.D.s in all these fields. We ought to be asking for more than the 10 percent." We kind of kicked things around. I had kind of a funny story, statistically, to tell. I said, "Let's do it 10 percent times the square root of two." That's 1.4. So we agreed to do around 15 percent. That was our goal to do, although 10 percent was the national number that we could always point at and defend ourselves. We got up to 27 percent.

The wonderful little side issue here--just to show you how things go--many years later, our daughter, Christina, was head of the senate committee on the status of women and minorities. She was chair at one point when they turned out a report. When the report came out, I got a copy of it. I think she sent it to me. She actually did not make the connection to my provostship, that I actually--with these two young women from the chancellor's office--put together this affirmative action process.

In the report, one of the conclusions was that "we have slipped from the high point of 27 percent in the years" etc., etc., down to, oh, maybe 20 percent. I've forgotten what the number was. I just called her up. I said, "Do you happen to know who was provost and who was head of academic personnel at that time?" She said, "No." I said, "That's me. I designed the whole process." Of course, she just howled with laughter [chuckles]. Here, our daughter is reviewing my record! [laughter]

But today it's much, much better. The whole process is streamlined, and people are more with it. I mean, this is not an issue any longer.

Swent: Didn't you in fact, though, change the curriculum? I think women's studies began when you were provost.

Maslach: Yes, women's studies began. That was Provost Rod Park's job. And also various minorities.

Swent: You are given a lot of credit, though, for advancing--

Maslach: Well, you see, the thing that bothered me when I went to that first OCR meeting in the chancellor's office was that I had had a record in engineering. I had written these brochures, I had gone out personally and visited more than half of all the community colleges and brought minorities and women here. It wasn't large numbers, but today we're talking 10, 20 percent--probably around 20 percent today in engineering, nationwide. Women. Asian minorities were never a problem in engineering, but blacks have become a larger fraction of all engineering.

So I had this background of already doing all these things at the student level, and so getting on to it at the faculty level is a real problem because the problem today still exists. The major problem is we don't have enough minority students, and women, going for the Ph.D. It's never, I don't think, going to become 50 percent in all of the disciplines. In some disciplines it's going to be more than 50 percent women, but you're not going to get 50 percent women, as an example, in every discipline.

### The Difficulty in Getting Women Chemistry Professors

Maslach: So what do those departments do? Well, they just have to produce the women themselves. But then we have a stricture against appointing our own Ph.D.s, for good reason. You take chemistry,

which had really the greatest problem in affirmative action, within the professional schools and colleges. You don't realize this, but chemistry college turns out of a lot of women Ph.D.s. The question was how come you don't hire them? If there are so many out there, how come you don't hire women?

I was on their back for years. At one point, I asked the dean if I could have the names and addresses and phone numbers of all these people. Then what I did was I made a personal survey of every woman that they interviewed over a period of, say, five years. I made a hundred phone calls, easily. I found out what were the problems with regard to women coming here at Berkeley.

Unfortunately, it's a legit problem from the standpoint of chemistry. They pride themselves on having their faculty work in the laboratory, like a T.A. [teaching assistant] Glenn Seaborg worked in the laboratory, right up to his last years here. But the women, especially, knew that they were under the gun to make tenure, and working in a laboratory takes a lot of time. And so they just objected to that. Then they had some other kind of not as simple curricular reasons. But I got all these reasons from all these women, as to why they turned it down.

Swent: Turned down?

Maslach: An assistant professorship here. They would not come. Just to make it a little humorous, one of the biggest problems we had during this time was to find jobs for the husbands of women faculty--just the reverse of what had been earlier. But earlier there were not Ph.D. wives, but here many of the men were Ph.D.s, so what kind of a job could he get? This was a real problem. I know of several cases where we just couldn't get the woman to come. It was very sad, but that's the way it went.

Anyway, that was one of my big accomplishments during the provostship. We kind of passed that by, but it just kept recurring. It kept coming back. You had to pay attention to it. It was not my idea of what I should be doing as provost, but the vice chancellor really had so many other duties that it kind of fell between the cracks.

During this time, the chancellor was able to get a full-time legal assistant, and we've had that man ever since. Each campus has that legal advisor to the chancellor.

Getting State Funding for University Buildings and Equipment

Maslach: About the same time, an awful lot of people were recognizing the problems of the funding for the university. Much of the funding, of course, was presentations from the chancellor's office, through the president's office, making presentations before the Senate Finance Committee or senate legislative analyst up in Sacramento. I got into that--at first, through the problem of buildings. We had, in engineering and other colleges within professional schools and colleges, less than the amount of space that we deserved by the formula of the legislation.

I got going up and down to Sacramento on this and got to be quite friendly with Senator Roberti, who was a big power in those days in the Senate. Term limits moved him out of the Senate, and he is now doing something else. We seemed to have good contact. Also, a couple of the senior staff members of the legislative analyst's office. Alan Post was the main legislative analyst during that time. I got into a quasi-political situation because you're up there, talking to people, and they always would say--not this bluntly, but "What does this do for me and in my district?" It was sort of a not-in-my-backyard and in-my-backyard type of discussion with a lot of legislators.

I had to kind of push the university as a whole, rather than just what I was going to do. I was kind of proud of my presentations because--the vice president who was in charge of the budget recently retired--Bill [Baker?]-I'll think of it again. He would just make the announcement to the Senate finance committee, and Bill and his staff would just walk out, and I would be there all alone, making my presentation [laughs]. Out of that, I was able to get an optometry building, and I was able to get funding for Public Health. This was a medical sciences bond issue that had passed in the state. But I also worked on other aspects of the building program.

At the same time, I was always very impressed with how bad our equipment was for laboratories. I'll just take chemistry because it, to me, was the most dramatic. They were still using beam balances that date back to 1900. Beam balances take a lot of time to use to get an accurate reading. It's an art learning how to use those old beam balances. There had been complaints about that.

One day I approached Frank Ketcham, who was in the budget office, the chancellor's office. What he did was pull out of the computer basically a listing of all of our undergraduate laboratory equipment and its age. Every piece of equipment is



identified; it has a serial number. It's in the record. That record was one of the most horrible statements of decline of this university that I have ever seen. I could take anybody at that time to community colleges right next door, the wealthy ones down on the [San Francisco] Peninsula, and in the laboratories, their equipment was so much better than any that we had, in physics and chemistry and engineering. You couldn't believe it. No one had put any time into doing something about it.

Well, this is not professional schools and colleges. This was campus-wide. Frank and I got together. I have to give him total credit for doing all the hard work, but basically we came up with a program to replace all the old equipment over a period of years. We couldn't get it all in one year, which would be a very large sum of money, but we figured to spread it over, say, five years. And we did. When I made the presentation for this as a budget item, it was accepted immediately. The committee voted unanimously. In fact, they just cut my presentation short because they knew that it was all good purpose.

We got money. Oh, it was in the millions of dollars for each provost.

Swent: This was from the state?

Maslach: From the state, to replace teaching equipment at the undergraduate level. We did well. Immediately, in a subject like chemistry, which had the largest problem within the professional schools and colleges, would get a third to a half a million dollars each year. We were really doing a good job. Everybody in Sacramento--also the president's office--thought this was great. They went to Los Angeles and other older campuses and instituted the same thing. It became a standard budget item, replacement of this equipment. That was a major contribution I made to my Sacramento scene in that regard.

At the same time, if you really looked at what was happening within higher education and especially within the state, we were getting less and less money from the state, and we were getting more money from the federal government. We were getting more money from agencies within the state, for research and public service, but our basic teaching concept of this state--written into its constitution--was sliding down the drain. It was really moving quite badly.

I thought that when Jerry Brown came in that there might be a change there, but when Brown came in, it was even worse. He was a believer in smaller is better, and we took more of a beating from Jerry Brown than we did from previous administrations,

including Republican administrations. The [following] Republican administration, under Deukmejian, was very strong in favor of the university and its budgetary problems.

We here at Berkeley had the Berkeley Foundations, and we had a private giving program, which, when Bowker became chancellor, pulled in \$4 million a year, which is quite a small amount. It was overwhelmingly for scholarships and things like that--scholarships in the memory of somebody, and so on. The foundation had a board of directors that had overview on the fundraising operation, which was under the direction, incidentally, of Dick Erickson, who had been head of the Alumni Association for years and in the thirties was a quarterback on the football team, so he was well known. If I may point out, I think the athletic programs were getting a large piece of money because of the alumni and the Bear Backers [alumni sports supporters].

But Bowker wanted to change things; he got the board of directors to authorize a review of fund raising in general at the university levels and UC in particular. This was under a famous organization still in effect, Peat Marwick and so on. There are about four names. Peat and Marwick, I think, are still in there, but the other names keep changing. It's a national organization that does reviews for industry and commercial operations.

They came up with a report. One day--I'll digress a little.

I have to explain to you my relationships with Bowker here. Bowker, living at University House, would walk over in the morning and go to work, and I would drive down and park and go to work. My office was on the opposite end, the north end of California Hall, and his was in the south end. We were diametrically opposed. There were numerous times during all the years I spent there in which Bowker would come into the secretary's office and ask--or quite often not even ask; just say, "Is he in?" And whichever secretary at the time--April Roy being a good example--would just nod. He would just go to my door and open the door.

He opened it so quietly, and he walked with crepe-soled shoes, and he was so quiet, he could be in my office, just standing there, and I wouldn't know he was there. I would be working, maybe dictating. Finally, I would sense something was there [chuckles]. I would look around, and there was Al Bowker. That was a joke between the two of us. I said, "My, you are quiet."

One day he came in in the morning and said, "What are you doing this afternoon?"

I said, "Nothing that can't be changed."

He said, "I'd like to have you sit in with the Berkeley Foundation board of directors. We want to discuss changing our giving program--increase private funding for the university, Berkeley campus."

I said, "Sure." I said, "What do I need to know?" He tossed this thin report--big report--from Peat Marwick Mitchell or whatever.

I read it sometime that morning, and then I attended a meeting which was in the chancellor's conference room. A discussion of that report was to be on at about two o'clock. Well, it turns out that I knew half the people on the board. Gene Trefethen was a member, and he was very active with us in engineering. And a couple of others. But I would say of the seven members of the board, I probably knew personally four of them, so I was in good condition to walk in and meet with them.

#### Chancellor Bowker Changes Campus Funding by "Unleashing" Colleges

Maslach: Now, \$4 million when Bowker started. When he left, annual giving was around \$50 million. He was the man that made the basic structural changes within the campus, and the campus thinking.

In the report, there were two recommendations. If the campus wants to get started on a giving program which is new and different and bigger, it either has to go the route of many universities and have a large-scale, multimillion-dollar giving program--and this is something that Stanford is in the middle of right now, and we are also, here; we're talking now the billion-dollar level--over "x" years. You either set up a big program, for which you have to have a big staff and professional people outside to do this, et cetera. That's what you do.

I gave examples of the successful programs back East. You have to remember, the Midwest and the West Coast are heavily land-grant colleges, and therefore public institutions are not expected to ask for private money. We had a big family argument on this because my wife's cousin was vice president of Stanford, financial affairs, and he just lectured me with vehemence on this point. I pointed out that they get a lot of public money from

the state and the federal governments, but that didn't seem to make any difference.

The second recommendation, if you don't go for the big program, was to, quote, "unleash" the professional schools and colleges to develop programs with their alumni. This report recognized, without saying it in so many words, that there is an enormous loyalty of the alumni of--I'll take engineering--to this College of Engineering. This turns out to be quite true of all of the departments. You remember yourself not so much as a member of the campus; you remember that your home was the department of English; your major was English. That's where your loyalty is. Engineering--why, there was engineering.

After the whole thing was over, I met the next day, I think it was, with Bowker. I said, "I think we can unleash the--." He didn't want the big program, so "I think we can unleash the colleges." I was a little wrong on this because not all of them really liked the idea of going out and raising money. But I proposed--in a week or so of thinking about it--I proposed that we fund--let's take engineering, where it was the most successful--by giving engineering enough money to have an office. That was \$30,000 a year, we came up with. And other areas, \$40,000. I think the most we ever gave anybody was business administration, \$50,000 a year.

Bus. Ad. went to private giving and developing funded professors, name professors, endowments. That was their push. Engineering was much broader. They went for that, but they also went for a lot of other kinds of money, in research. For example, every assistant professor in engineering gets two months of research funding while he's an assistant professor. That's pretty damn good, considering what we had to go through years ago. That's wonderful. That helped our recruiting enormously.

I went to the deans of the professional schools and colleges, made this announcement to all of them. A number of them were for it; a number of them were against it. I could not convince people who were against it, although with time, later on--take chemistry, who did not go for it immediately. Later on, they saw what engineering was doing, and they went and used the staff in engineering's office and essentially borrowed time and developed their own giving program, which has ended up essentially what we would have done ten years earlier if chemistry had been willing to go after private giving. In fact, their last two buildings--the last building especially--was totally privately funded.

Most of the buildings now--33 percent of the campus's buildings for instruction are privately funded. It became a major effort. It was very easy to convince engineering. Ernie Kuh was dean, and he was all for it, and we were in the midst of developing a student center in engineering. We had our eyes on the Bechtel family and the Bechtel Corporation for that engineering center.

With various degrees of success, and since we're in a library, I'd like to point out that librarianship, a very, very small professional school at that time, raised a very large amount of money, simply because they put on a symposium relating to a major professor years and years ago, and his work and his influence. A woman attended, alumna. She was living in northern California. She had been a librarian in some small town up there. She said, "If you people need some money, why, contact me." The dean didn't understand. To cut the story short, she married one of the wealthiest lumbermen in the state of California, and she was worth a lot of money. She at some point, I think, gave on the order of a million dollars. She supported them with small things until they got used to the fact that she had a lot of money [chuckles]. She did a wonderful job helping the school of librarianship--now information sciences.

The same thing happened with other small schools. Journalism had good funding, at a low-key level. When they moved into North Gate Hall, why, they were able to do a lot of things there in the physical environment. But engineering was the star of the show. Engineering for years raised more than 50 percent of all the private money that was raised on this campus. And I'm not talking small dollars.

##

Maslach: Engineering would pull in on the order of \$50 million in a given year. I remember one year, because my name, because I was provost, was on an IBM gift which ended up to be \$15 million over a period of time. But we got all kinds of equipment as well as money directly.

Swent: The buildings are the more conspicuous evidence.

Maslach: Well, that's the single biggest thing; however, the support of faculty is very good and the endowed chairs is very good in that regard.

I want to give a more historical background on this. Various schools and colleges did well; others refused to get involved. They all thought of fund raising as going to your

alumni and asking them for five dollars or so each, and stuff like that. That's just not the way you do it. You work with corporations. This kind of ties in, fund raising, with Al Bowker and his ability to get people to do this. I remember one time we were talking in my office, just casually--maybe his office--I don't know. I used to see him in his office every week, regularly, for just discussion of agenda items we both came up with.

He was in the middle of raising money for the library in Chinese studies. He had wealthy donors potentially available in the Bay Area Chinese community. At one point, he said to me, "I just hate to ask for money."

### Obtaining Funding for the Bechtel Student Center

Maslach: I said, "I have a little experience of this." I developed a technique which is very simple. I just have a proposal and have a budget sheet on the end, and I give the proposal to the people: this is what we want to do. I don't ask them for money. Never. Let them make up their mind what they can contribute. In other words, put the onus of the decision on the part of the giver. It works out very well because then the giver feels that they're involved, and you let them know there are certain kinds of ground rules. For example, 50 percent of the budget, and the building is named after you, or something like this.

He liked the idea, and I remember it was a small amount of money, on the order of I want to say \$50,000, which is small, compared with the millions that were raised. He went over to a luncheon meeting in San Francisco, and he came back, and he didn't just slip into my office quietly. He came back. He had a check for \$50,000, the total amount he was putting in the proposal. Didn't ask for it specifically. He says, "It works! Look!" [chuckles]

Al and I got to be quite close in this regard because the next fund raising we wanted to do was Bechtel Corporation. Al realized that he should be in front on that one because the Bechtel family is a big operation within the Bay Area. It shouldn't just say the Bechtels give only to engineering or something like that. Same way with the Haas family. They do so much for the entire campus, not just business administration.

He agreed to make the presentation at Bechtel and he went by himself. I didn't expect him to ask me, but I think that other

people in engineering thought that they might be asked to give background information. I had sort of lost touch with the project. He went over there, and he came back. I remember he phoned, and he said, "Come over to the house." This is something that I used to do every once in a while. I'm sure other people did it as well. He had a little office in the house. Of course, University House is a beautiful place to sit. An alcove that faces to the west. Why, that's where we'd sit and have a drink and talk.

He came in. It was late. He told us that everything was accepted, and they looked at it and they were all for it, the Bechtel Center. Everything was hunky-dory; everything was moving smoothly, he said, but they didn't give any indication of an amount. We talked it all over, but he was sure that it was a very, very successful presentation. Within days, the Bechtel family--Steve Bechtel, Sr., at that time--sent a letter, listing the donation of the family, the corporation, and various members of the corporation who ponied up large amounts of money--half a million dollars for this man, and so on. They had about two-thirds or three-quarters of the Bechtel Center all budgeted, all paid for. Of course, there was great joy within the chancellor's office and, of course, within engineering because they had been struggling with this whole problem for a number of years.

This is the way that the whole process went through. It has had all kinds of ramifications. For example--I made the statement earlier, which was wrong, that I got an optometry building. I did, but I got the state to pay for it, the state legislature; but they put a restriction. They said no equipment, just a bare-bones building. So privately, the optometry alumni--one meeting--millions of dollars over a two-year period. That's the most beautiful building inside you've ever seen. The equipment is just out of this world.

Those kinds of donations made not just by alumni but by organizations, by individual corporations and so on. It's amazing what was done in the private giving, once it got down to the grass-roots level. Bowker's genius was to take it from the campus level, where we had an office over there in North Gate Hall, and now get it down into the dean's level, the department level. And that's what really paid off.

L & S did not really move in this area. It was not indicated in the report that I told you about because they found that in other institutions, colleges of letters and science are such a large, non-homogeneous grouping that it did not have that loyalty. The loyalty is to the department. Now if you look at what L & S does, it is at the department level. I regularly get

from math, physics, requests simply because I'm on their donation list somewhere. That I think was a major, major achievement that went beyond engineering, of course, and went to the total campus.

I'm trying to give you sort of a framework of what the hell a provost did in those days. We were putting out fires, like the Office of Civil Rights, affirmative action. We were doing major changes, such as developing money. And I was influencing curricula at each of the schools and colleges by going down and talking with them--or up there and talking with them. In other words, my technique was to visit them on their turf. I got quite friendly with the agriculture-forestry amalgamation.

Of course, engineering--I was always up there. Not that I ever intruded. I want to make that point. I went only when I was requested to come. I have a very big thing about not interfering with any administrator that follows me. If they come and ask, why, then I'll talk.

But I spent a lot of time with chemistry and most of the time with the individual, smaller, schools and colleges, like journalism, librarianship, and so on. They just needed more hand-holding in this regard.

### The School of Social Welfare Gets Accreditation After All

Maslach: A story, just to give you an idea: [The School of] Social Welfare under Dean [Milton] Chernin had run into bad times. During these periods of our troubles, why, the alumni group in the Bay Area--Social Welfare--issued a report condemning the school for not taking more liberal actions and not doing things--I mean, it was almost like a protest report, a report from a group of protestors. You could see their sensitivity. You know where they're coming from, but it was not a very useful report. The Graduate Council also reviewed Social Welfare about the same year, and they came quite negative, but they did not have any major things that they were talking about.

At the same time, the national accreditation came up for review. That's usually every ten years or five years, depending upon how good you are. The national accreditation group came in. These are faculty from a variety of schools. The usual thing is to have an exit interview with the chancellor. Okay. So they came over on a Friday afternoon about two o'clock, and we had a fine coffee meeting with the chancellor in his office. They gave their results. The results were that accreditation should be



held back. In other words, Social Welfare at Berkeley should be put onto a provisional type of accreditation, and they should be doing certain things to improve, etc. That was the gist of the report.

I was really kind of turned off by the people on this committee. They were bombastic, aggressive, very assertive, very adversarial. Bowker, of course, was, in his usual quiet mood, taking it all in. I was the point man to respond. We got to kind of a quiet point, and I said, "Well, is that it? Is that the way the report is going to be--." They're giving us a preview of the report, basically. They said, "Yes." I said, "I've been sitting here thinking, and the alumni locally condemn the school, the Graduate Council of our Academic Senate essentially condemn the school, and now you as a national body condemns the school. Maybe we ought to just do away with the school."

We had just done away with criminology the year before. These people just--oops! You could see the change in their faces. They thanked me, and I ushered them out, and went back in with Bowker, and I said, "Did I say the right thing?" He said, "Yes." So we just waited. Two days later, I got a phone call. The report had been rewritten, and the School of Social Welfare had a full ten-year accreditation.

Swent: For heaven's sake!

Maslach: This was kind of the inside workings of a provost. I just felt that we ought to stir things up. About that time, Chernin reached retirement age, and so we were able to make changes within the school, but in an orderly fashion, following the report of the Graduate Council. The alumni report was just a knee-jerk reaction of ultra-liberals, maybe, although it really was not of any usefulness to us. The accreditation report was of no value at all. We just changed things. We got a bunch of new assistant professors in there, and that was it.

One of the things that both Rod and I insisted on--I especially--was that we have minimum of appointments at the tenure level. Prove your worth while you're here. If you buy a tenured professor from some major university, people remember him or her as the tenured professor from University X or Y. We wanted to have assistant professors in general as the majority of the new appointments. That's what we were able to do. I don't know what it is now. I lost touch. Everything has changed because we've had all the retirements, the voluntary retirements, the VERIP program. I don't know just how that office of academic

personnel operates today, but I'm giving you essentially what I did when I was there.

### The Work of the Budget Committee on Academic Personnel Matters

Maslach: One of the jobs for both Rod and me was to work with the budget committee, which is on this campus kind of a misnomer. Other campuses call it the academic personnel committee or something of that nature, which is more descriptive. I would have regular sessions downstairs, where the budget committee is located, on the first floor of California Hall. We would discuss cases. If you look at the report of the budget committee every year in the Academic Senate report system, there are so many appointments made, so many advancements made, so many promotions, etc. There's always a reckoning given in each of these--appointments, tenure, non-tenure, chancellor's position, agreement, and so on.

Remember, the budget committee is required to give advice to the chancellor, and the chancellor makes the decision. What you try to do is to minimize the number of confrontations and/or the number of disagreements. If you look carefully, you'll see that they are usually down at the one or two level for the year. Maybe one here, one there. Actually, in the professional schools and colleges, when I first became provost, the disagreements were quite large. I'm talking five or so per year. So I made it a point, and I did all these things to improve the situation. I was welcomed down there. It was never an adversarial thing. I knew everybody on the committee personally. The year that Bill Fretter was chairman, why, Bill and I knew each other for years before.

Tom Flanagan in English, when he was professor and was also chair of the committee. He was a wonderful person.

Swent: What was that name?

Maslach: Flanagan, a great author. The first major book that he wrote--he left the university and went to New York. He's absolutely devoted to the Irish cause, and the Irish community in New York is where he blossomed. *The Year of the French* was the first volume, which was a major prize-winning novel, documentary novel --put it that way. That's when the French invaded Northern Ireland--many years ago. But he wrote so beautifully. He's truly an author--I would read his work and I would read a paragraph and I would just stop and admire it and go back to the

beginning of the paragraph and read it over again. His writing is just fabulous, just a flow that you cannot believe.

Louise Clubb was chairman--she's from Italian, comparative literature--so we always had good feelings. I remember when I first came there, the first meeting with the budget committee, I'm essentially making my position known on the case, which is in opposition to their position. There was a faculty member who was from English. He was sitting next to me. I said, "I'm sure glad that I'm able to come and visit with the budget committee."

He says, "You're not visiting the budget committee. You are *ordered* to appear." [laughs] We all laughed, of course. He meant it as a joke. He was being very flamboyant, but that sort of gave a tone of humor to the whole situation, and we were able to discuss cases individually.

Let's say in a given year there are six cases in which we really have some fundamental differences. Why, by this discussion process and working hard, really, by going back and getting materials and so on, I would get them to change their position on, say, two; they got me to change my position on two. It doesn't work out numerically, but basically while I was provost we never had more than one or two disagreements with the chancellor's office.

#### Improving Appointment Procedures in the Academic Personnel Manual

Swent: This was a change from previously?

Maslach: Oh, yes, cutting it down from maybe five or seven, down to two. The point I'm making is we improved the relationship of the Senate and the chancellor's office. The one point of contact, which is enormous, is the appointment of new professors and their advancement. We were able to do good things at that point. I contributed mightily for a number of years into the rewriting of the Academic Personnel Manual, which was about two inches thick. Section 50, 52--that area is the appointment procedures and process. I got a number of things across that were later adopted system-wide. In this manual.

For example, when I was in engineering, I remember a professor--I just could not understand his research. I thought he was sort of a dilettante. What I did was I said, "Hey, send me a memo through your chairman of your research and what you're doing and why you're doing it. What's the importance of what

you're doing? Is there a direction in here? I don't see any direction."

He said, "Don't worry." He sent this memo. It made everything crystal clear. He was doing something with a long-term view that was not apparent if you just looked at one paper or another. And so I appended this to his case and used it in my commentary as I sent it forth to the chancellor's office.

When I became provost, I said, Hey, this is a technique that I think every faculty member has a right to do; namely, to review his own career and say what he did and why he did it. The budget committee thought that was the greatest idea since sliced bread. That immediately became something. It was incorporated in the Academic Personnel Manual very, very quickly.

This is the kind of thing that I had an overview from my previous knowledge of being on review committees, first; two, being a chairman and preparing a case; three, being a dean, reviewing a case; and now being provost, reviewing a case. With all that experience of all these different levels, I saw where there was a communication block. The main thing was with regard to getting something directly from the professor. The professor knows the seventh year he's going to be reviewed in the eight-year period of assistant professorship, assuming there are no accelerations. At the end of the seventh year, he's told.

I had one very sad case. It was actually in a college that people are still around, so I won't mention people's names. But basically, they did not know what this guy was doing. There was a changeover in chairmen, and then there was another quick changeover because of an illness in the chairman or a death--I've forgotten what. So there was just no communication. I incorporated another idea that I had, and that is to improve communications.

#### Learning from Experience the Power of the Carbon Copy

Maslach: For example, if the response from the chancellor's office back to the dean is negative, what I did was I required the dean to share this information with the department chairman and the professor that was being reviewed. I can tell you that there were years in which that was never done. I told you early on, the years here at Berkeley, I learned that I was appointed associate professor from the custodian of the building that I had my office in, because he had read in the morning, early, the announcement which

was printed at that time. Sure enough, on the second page of that announcement was my name as associate professor. I never received anything in writing. Nothing!

What we received later, in those early days, was a contract, which you had to sign. We signed a contract, a big sheet of parchment-type paper, and we signed a yearly contract. That was really strange.

Swent: No communication.

Maslach: You heard about it maybe a month afterwards, you know? You know you're up for review. If you did not make it, you want to start looking for a job elsewhere. It was just horrible the way this whole thing was done. This communication technique I used was the power of the carbon copy. There was a carbon copy of this statement of mine. Went to the chairman, went to the dean, and so on. But I did not send them. I sent them all to the dean, "Please forward these, unless you find something wrong that you want to talk to me on." I had this multiple carbon copy, which is one of my techniques of administration I popularized, and people are still using it.

That is if you really want to rouse the level of interest and stop people who are being nasty or negative in a way that you cannot counter, what you do is publicize something by writing a memo and sending carbon copies to everybody! I'm talking fifty carbon copies. All of a sudden, what you said in the memo is what has happened. You give them the background. This is it. That's what the record shows. Everybody shuts up. Really, it works.

I know [Chancellor Chang-Lin] Tien used to ask me for and used to get all these administrative techniques. He called me his role model.

#### Advising Chancellor Chang-Lin Tien on Streamlining Procedures

Swent: Do you think these come from your engineering training?

Maslach: Well, I think there's a lot to that. It's not just engineering. The physical sciences in general have this technique. The scientific method is applied to bureaucratic monstrosity. A lot of things you cannot change, unfortunately, but there are a lot of things you can change. Certainly, you can change everything within your office.

The most famous thing I did for Tien was I told him, "You never read a memo twice." By that I meant you don't pick it up, put it down, and later pick it up and put it down and so on. I demonstrated this for Mark Christensen as well. I say just take all the material that comes in in the mail and put it down. Hopefully, you have someone like Rachael who had organized everything in terms of importance. All the catalog junk is down at the bottom [chuckles].

Swent: I would like to think that as provost you wouldn't get that sort of thing.

Maslach: By that kind of junk I mean stuff you read and throw into the circular file [chuckles]. I said, "Here's what you do. You just sit down and you read this memo, and then the first thing you do, you make up your mind, can you answer it? Do you need to get more information? Is this memo something for you to answer? Maybe it doesn't require an answer." But I would always initial it when I read it. This was the first time anybody in the chancellor's office ever did that.

Swent: Really?

Maslach: Yes. Everybody kind of laughed at that at the beginning, but then they realized how important it was. And then I would jot down a thing and then give it to my assistant to take action on. Or I would pick up the phone. I was a great one for doing all my own phone calling. All the people outside, the secretaries, would always be surprised. It was the provost, himself, calling. They would say, "I'll send it to Rachael or to April."

I said, "No, send it right to me."

Getting involved personally was a very important trademark of all my administration. You just have to learn. As I told you earlier, I once walked over to mechanical engineering and I was by myself, just looking around. All of a sudden, a rumor got started that I was going to take space away from mechanical engineering. So you can set up panic situations if you don't do things correctly.

Yet there were times when I went and saw Hans Einstein, and had this wonderful talk with him. The first time a dean ever came to his office. Well, you would like to try to do more of this, and I did spend a lot of time outside of the office, going up to journalism. The smaller schools and colleges were not as paranoid, but some of the larger ones were. I know going down to forestry and agriculture I had problems a couple of times.

Planning for Succession in University Administration

Swent: Did you do anything about grooming a successor?

Maslach: No, no, no. I did not groom a successor, but I have a story to tell you about that. When Bowker left--I'll start with that story. There's two stories wrapped into one. One day, I'm sitting in the cabinet, which is, as I told you, seven or eight people with Al Bowker. There was some kind of a dull presentation being made. I started looking around. I suddenly realized that next to me was Sandy Elberg, who was a couple of years older than me. Across from me was the vice chancellor for finance. He was Bob Kerley, and he was a couple of years older than me--one year, maybe. And over here was--I've got a block on the name. Oh, vice chancellor for student affairs. I've already mentioned him earlier. He was about a year younger than I was. I knew Bowker and I were exactly the same age.

So you had Heyman and Park were both younger by a ten-year kind of a span. I was thinking. After he got to the end, "Does anybody have anything else to discuss?"

I said, "Yes, I would like to throw out a piece of new business. I'm just sitting here and looking around, and, you know, there are five people here"--I think it was six at the time--oh, [Errol] Mauchlan--he was our age. So we had all these people. Mauchlan was budget [financial services], not student affairs. At any rate, I said, "There's six out of eight here who have a birthday within a year or so of each other. When we all retire, there's going to be a hell of a vacuum. There's going to be a major change."

I was looking at Bowker at the time. He looked at me, and you could just see recognition in his eyes that there was a problem. I said, "Why don't we just have a 'come to Jesus' meeting and just all sit down and say what we're going to do, when we're going to retire, and so on."

He looked at me--I love that man--he says, "No, George, I think I'll talk separately to each one of you." [laughs]

##

Swent: So that's how you started.

Maslach: I started discussions, different people--directly with Bowker, of course. What you wanted to do when you wanted to retire. I said I wanted to retire a couple of years earlier. Well, it turned

out that Al had an agreement with his wife, Rosedith, just the most wonderful person. She was working at Stanford. When her retirement process, which is separate from the University of California, obviously--his retirement process, which is now embedded in the university--they had come to an agreement to retire when a certain date appeared. I forget when it was. It was earlier because Heyman became chancellor.

He told me about his retirement. Mine would be roughly a year or so later. We all agreed, and everybody worked with him.

Norvel Smith was the vice chancellor for student affairs.

So everything was worked out very pleasantly. We came up to the point of having to find a new chancellor and going through the process of a search committee. There was lots of thought given to this by a lot of people, including the Regents. Do you need an outside man or an inside man? We went through this earlier, when we were on the search committee for Bowker. What kind of a man do you need, or a woman? We had all kinds of searches going on.

I don't think there was any big competition within the operation. I do know that at that time it was common knowledge that Mike Heyman had been interviewed by the regents for the presidency of the university, which did not, obviously, come to fruition--for reasons, some of which--I don't know. I really did not keep much contact with that.

Park and Heyman were obvious choices for chancellorship here. If you may recall and you might get the dates squared up, but Rod Park went to the University of Colorado, where he was acting president. After a short time, he became president of Colorado, and just this last year retired as president of Colorado.

Eighty-three was when I retired. Bowker retired around '81.

Swent: So the president who was named when Heyman would have been considered, that was [David] Gardner?

Maslach: Gardner, right.

Swent: He came in in '83.

Maslach: Yes.

Swent: No, no, it must have been earlier. [David] Saxon was '75 to '83.



Maslach: I was actually on--not a short list, but I was one of the people interviewed by the Regents for the presidency when Saxon came in.

Swent: When Saxon came in. Was Heyman interviewed at that time?

Maslach: No, no. Heyman was not very visible at that time.

Swent: I see. He became chancellor in '80, and Gardner became president in '83.

Maslach: Right.

Swent: And Park was provost at the same time you were.

Maslach: Yes.

Swent: And then left for Colorado.

Maslach: So, to get back to your question did I groom anybody, Mike Heyman came to me when he was chancellor and asked me if I knew of people who would be good for the provost position. Mike was very big on affirmative action. I must give him great credit. When he was chancellor (I'm kind of overlapping here a little)--

Swent: Yes. You continued as provost?

Maslach: I continued as vice chancellor for research and academic services for two years.

Swent: Yes, but when Heyman came in, you moved from provost to vice chancellor.

Maslach: Yes. He asked me if I had any suggestions. I was the one that recommended, if I can put it that way. I said, "You ought to look at Doris Calloway." She had been doing a very fine job in the field of nutritional sciences. Was a major, internationally-known faculty member. I thought that she had everything going for her for a job like the provostship. That appealed to him tremendously, of course, because it was a woman candidate that was qualified. He thanked me profusely for that.

I really had nothing to do with the next one. The next one turned out to be a chemical engineer [chuckles]. I was out of it totally and never wanted to be involved.

A Peaceful Recapture of a Building Where Students Were Protesting

Maslach: But before Bowker left, there was one incident which I think I should relate to you, which gives a historical tone to the way the chancellor's office was run by Bowker. He managed in such a wonderful, low-key way, but totally in control. One day we had a meeting at the University House. It was in the afternoon. There had been a Mexican-American protest--students--a very low-key, weak, statement out in Sproul Plaza, basically to increase enrollment of Mexican-Americans on the Berkeley campus. There was another couple of protest groups wandering around.

While we were at the chancellor's house in the afternoon--this was a cabinet meeting--we were notified by the chief of police that Haviland Hall had been occupied. It was occupied by a nasty activist group, I'll call it, who had co-opted a lot of Mexican-American students who were at that protest, who were students from other schools and colleges. They occupied Haviland Hall.

We had kind of a coffee break. Mark Christensen and I walked down to Haviland Hall, which is, as you know, just over from University House, very close by. We went down there. There was a lieutenant from the police force at the door. On his side of the door--it was open--was one of the protestors. The lieutenant and the protestor were just casually talking and laughing. We came up, and the protestor, I don't think, knew either one of us. I said, "Could we come in?" I think Mark said it, Mark Christensen, "Could we come in?" He says, "Sure, sir."

We went in and were wandering around the building. They were all holed up--a small group--they were all holed up in the library. That's on the second floor. Beautiful library. I used to study there when I was an engineering student. It used to be the education library. We went in, just walked in.

"Oh-h-h-h-!" Everybody jumped. All the student activists who were leaders of the movement, whatever movement it was at that time. They just: "What are you doing here?!" They felt that maybe the police had already taken over [chuckles], and we were the vanguard upstairs. No, we were just walking around.

"Are the police here?"

"No." The "blue meanies" were who they thought were coming in. No. So we just chatted a little while with the leaders of this group. They gave us their demands, essentially. And so we just walked out and went back up to University House.

Bowker had arranged for us to stay over for dinner. His head of his household there, the woman who ran the operation, had it catered by Narsai David, who was the big caterer at Berkeley at that time. He came up with one of the finest gourmet meals I ever had [chuckles]. I still remember. It was rack of lamb that was perfectly done. So here we are up there, having our discussion. Oh, a couple of people were for the old technique of waiting until five in the morning and then taking over the building by storm. Others, no, we ought to do it this time; other people, a different time.

One of the turning points is you do it before the library closes because in the library, a lot of people would come over. Anyway, here's this discussion: what we should do.

I said, "I think that we ought to do it before ten o'clock, when the library closes, but that's not the reason. The reason is that we are supposed to have control of the campus, and ten o'clock is the closing time for buildings, period. That's it. And therefore at ten o'clock we should be in control."

The chief of police very properly took a very professional, neutral tone. He was waiting for his orders. The discussion was going back and forth. There were more people who were in for doing something dramatic and storming the building, stuff like that--batons, helmets. Bowker and I--he didn't say anything. He just kept his own counsel right to the very end. Bowker and I and somebody else--we were essentially for going in quietly. He announced that's what we were going to do.

I said, "Mark and I were just down there. Here's what the situation is. There are about fifty people. They've got all the doors closed except one." And Lieutenant So-and-so was there, talking with them. I said, "We just walked in." I said, "I recommend that we"--talking to the chief of police--"go in, soft hats, no batons, just no 'blue meanie' stuff. Just go in, and that's it."

He was all for it. The lieutenant actually had been replaced. He was up there, too. He was nodding. So that's what we did. Mark Christensen was in agreement on this, I remember. And we kind of smiled because we had been down there and done this ourselves. Sure enough, they had the police over here, out of sight, and the lieutenant was talking with a single sentry on the door. The police just came around, just swept right in, and just took over the building. That was it. It was the most peaceful building recapture in the history of any protest of any university anywhere. It was done in five minutes. The people

all left. We took cognizance of who they were. They all had to identify themselves.

Damage of the Worst Intellectual Type Done by the Protestors

Maslach: The nasty part of the whole story, however, was about a month later, I got a call from the librarian. The problem was that the people who were in that library had methodically destroyed a large number of books by just taking out, with a razor, a page in the index or another--page 45 or another page, and so on--so isolated pages in hundreds of books had been sliced out. You can't tell by looking at the book--it was done so neatly--that that page was missing. They had to review all their books eventually, to do that. But we spent on the order of \$300,000 to replace the books in that library.

Swent: How wasteful.

Maslach: No one ever, ever heard that. It was never publicized or anything, but everybody said, "Oh, they were so gentle, and they were so nice. Wasn't it peaceful? And no damage." Yes, there was damage, of the worst intellectual type, destruction of intellectual knowledge. It was horrible. I wanted to get it publicized, but I never was able to.

Swent: What happened to the pages they took out?

Maslach: Oh, they took them with them. I don't know.

Swent: Because otherwise they would have seen them in the wastebaskets.

Maslach: Right. But it was really one of the worst little destructive things that I remember at that time.

X     VICE CHANCELLOR FOR RESEARCH AND ACADEMIC AFFAIRS, 1981 TO 1983

A Memo Regarding Research: Fine, but Ignored

Maslach: So I became vice chancellor, with Heyman as chancellor. My title was vice chancellor for research and academic services. It was a constructed title. Never had that one before. I had always had many ideas on the involvement of the chancellor's office in increasing the environment and the situation for research on this campus. I still think there are things that could be done and have not been done. I wrote a memo that Heyman said was the finest memo I ever wrote. It went to President Saxon. He never took action on it. Then, when Saxon left to be chairman of the corporation for MIT, one of his vice presidents wrote me a little memo, thanking me for it. This was years later. But that memo today is still relevant. It could be used by the university system, which is really where the leadership should come--or individual campuses would be given certain authorities in the research area.

Swent: What was the gist of it? That was the gist of it?

Maslach: Yes. To be specific--for example, the federal research establishment is run by advisory committees. The advisory committees are overwhelmingly from East Coast, private universities. We used to have a lot of clout under [President John F.] Kennedy. As Kennedy pointed out to everybody, he had more cabinet members from Berkeley than he had from Harvard. Well, through that period--but when [Richard M.] Nixon became President, it was just a boycott on Berkeley and a lot of other organizations. Major advisors--Whinnery, Townes, etc.--were just cut off.

I think I told you earlier that I got my letters of appointment to the Naval Advisory Board from President Nixon, which was really quite strange. But before that, I did not get

it from any president; I got it from the Secretary of the Navy. It was really something.

Swent: I thought that Nixon--

Maslach: The science advisor was Lee Dubridge.

Swent: Yes, but I'm recalling Nixon had stymied one appointment of yours.

Maslach: Oh, yes. He wanted me to--actually, the dirty work was done at the vice presidential level, Spiro Agnew.

Swent: But your appointment was from Nixon?

Maslach: For the Navy Advisory Board, yes. It's really quite strange [chuckles]. But I thought that the West Coast, which has more than ten percent of the population now and has these major universities--the University of California, Stanford, Caltech, USC--the amount of money is enormous. We were just out there in the cow counties, essentially, as far as Washington, D.C., was concerned. So I thought we ought to be turning up and offering services in certain ways. That was never taken hold of.

Actually, Saxon was the wrong person for me to ask because he was now head of the corporation of one of the major organizations in Washington, D.C. I've seen Dave. I saw him, I should say, after he took that office. He used me back at MIT quite a bit. I have known many presidents and corporation executives of MIT.

#### Academic Services: Libraries and the Computer Center

Maslach: The academic services--there were three areas that were prime. I was in charge of libraries. In other words, the librarian reported to me, Joe--

Swent: Rosenthal?

Maslach: Rosenthal. Then, somewhere along the line, the Computer Center came under my direction. That's kind of a funny story. Bowker and I both--independently, separately--were looking at the Computer Center, which--the hard-core part is down deep in the second basement or third basement of Evans Hall. I was coming down the steps, which are fairly narrow, considering it's such a monstrous building. He was in the pit, they call it, the lowest

floor. He was just going around the wall to come up the steps, and we hit each other right at the steps, at the bottom of the steps. After a few humorous remarks, I said, "What are you doing?"

I was actually coming down to pick up some computer program I had down there. They had pickup times. I wanted to look at it. If you want to get a re-run, why, late in the afternoon, that's the time to put it in for the cheapest price, in the evening. They could run it any time, two in the morning and so on.

We started walking back up the steps, and he just looked at me, and he said, "Why don't you just take over the Computer Center?" That's Al at his best. He made up his mind. He knew something had to be done, and he wanted me to do it. This reflects upon something he once said. He said, "You know, George, you have the talent for getting the best people to work for you." What he meant was Rachael, April Roy, and others.

He would come down and have Rachael write letters for him. He used to drive the staff in his office nuts because her letters would just go straight through, and he would laugh and sign them, whereas letters that he had other people in his office draft, he would blue-pencil right and left.

In fact, one woman came down and talked to me at length. "What am I doing wrong?"

I said, "You're not doing anything wrong. You're just not as good as she is, that's all. She's a pro." So Al and Rachael used to have a lot of fun--talking and so on.

### Mike Heyman and Giving Up Smoking

Maslach: Mike Heyman used to come down. He admired Rachael. He was looking for someone and finally found a person to do what Rachael did, which was kind of organize my office and get the flow of the mail and so on and getting the work done and making sure it got to the right place at the right time. So he would come down. But he usually came down for another reason. He was quite a smoker, chain smoker almost. He was trying to break the habit, and so he was on some kind of a program and he would come down--he could only smoke so many cigarettes or take so many cigarettes from his home. In the middle of the morning, he would be down to Rachael's office, bumming cigarettes.

Swent: Oh!

Maslach: She would just have the lowest desk drawer, on the right-hand side--she would just open it and there was a carton of cigarettes, of the kind that he smoked, which was Marlboro. It's kind of sad. I'm puddling up because when you get right down to it, Rachel died of problems of emphysema and pneumonia.

Swent: Very sad.

Maslach: Yes. But the funniest part--funny for me; I don't think Mike saw it as humorous--but when she found out that she had serious problems with smoking, she quit cold turkey. She announced to me she was quitting, and that's it. And she did. Now, that's awful tough to quit smoking cold turkey when you've been smoking forty years, two packs a day.

Swent: That's heroic, isn't it?

Maslach: Amazing! I forgot what medical meeting she had, but something, and she was told, give it up or--so she did it. A day or two later, Mike Heyman comes down to bum a cigarette. She says, "I don't have it. I broke the habit." He was amazed. I think he was a little put out that somebody like Rachael was able to do that and he wasn't. He went on for a while. But he broke it eventually.

Swent: Now, you mentioned your pipe smoking, but you've stopped that?

Maslach: Oh, I did that fifteen, twenty years before--fifteen years. I was dean of engineering at that time when I gave it up.

Swent: Why?

Maslach: Well, I don't know. I just found I was coughing more. I think the biggest single thing was not the coughing, because I didn't inhale. Pipe smokers in general do not inhale. But I think the worst thing was the loss of taste. I like food, and I like to taste it, and I was just losing my taste buds. Now, "x" years later, I have the finest taste buds alive. No problem. So it was the loss of taste, I think, that was the most important thing. But I was not hooked on nicotine there because I didn't inhale. Pipe smoking is much more of an outside imagery thing than cigarette smoking. I've got this picture that was taken of me when I was provost. It's a profile, sitting and holding the pipe, a perfect profile, a black background. I always thought it was kind of an interesting picture. The pipe is dominant. I'm sort of staring into space.



I realized, when I took over the computer center, what a horror we had. We had two big old CDC, big frames, computers that were outdated. One was for general use of the faculty and the campus, and one was more for research. It was dominated by the math department. The Computer Center director was a mathematician. You have to remember, I was on the first committee that set up the first Computer Center, Ed Teller being the chairman of that committee. We set up this center in Cory Hall in engineering, and it was later moved to Evans.

There was a big, basic void, when you get right down to it. Bowker had surveyed the field with a committee that he appointed from outside and found out that we were not even maybe in the top thirty institutions with regard to computing instruction. We just had to have a major overhaul of the Computer Center. That's when I was given that job.

#### A Major Overhaul of the Computer Center with Stuart Lynn

Maslach: The director retired, resigned, a math professor. I had immediately the job of getting an acting director. I used one of the assistant directors there, who was the person who was in charge of the flow-through of all of the work. He was not an intellectual leader. He was not a faculty member. He essentially was the man that made the operation run. I instituted a search for a new director, nationwide. These were pre-affirmative action days, and so I got all these people applying--some from Livermore [Lawrence Livermore Laboratory], which had an enormously good, large operation, and then a number of others from universities throughout the United States.

I chose a man--Stuart Lynn--who was one of the few people that in my time at this university I honestly consider to be a genius. He was a Ph.D. out of the Los Angeles Numerical Analysis Mathematics program when it was at its height. It was the best in the world.

Swent: UCLA.

Maslach: UCLA, yes. He was an Oxford undergraduate. He was British originally. He came to the United States, and he was at Rice University when we appointed him. He really was what we needed. I interviewed him. He was a younger man--very dynamic and very British. He and I struck off very well. As part of his ethnic background, he was Polish [laughter].

We laughed at that. An English mother and Polish father--wartime marriage. I appointed him. I got the appointment through, I should say. Actually, Bowker has the final authority on the appointment and it goes to the Regents and everything else. But he came in, and he took over like you never saw anybody take over. There was a year in which I was essentially the person in charge, with the man running the daily operations. I knew all kinds of things that needed to be done, especially in the hardware business. We had to get away from this dinosaur operation into something modern.

I made all kinds of monies available, including that equipment money I was talking about earlier. We were getting money from all kinds of areas, moving into that computer function. The legislative analyst and his top henchmen up there in Sacramento knew I was doing it. They accused me--laughingly--of running the biggest laundromat in the state, laundering money. In other words, the secret is to have some outside accounts--in other words, money that doesn't come under the budget or under the feds or something like that. And then, of course, it's nice to have some fed accounts so you can move money back and forth. The Mafia knows all about this.

I would do this. For that year, I think I maneuvered close to \$3 million into the equipment budget. It was so wonderful.

I remember Dave Sachrison, who was chair of electrical engineering/computer science--he called and said, "Look, I've got a \$75,000 grant from the NSF"--National Science Foundation. "I have to have matching funds."

I said, "You've got it."

He said, "Listen, I spent all night writing this up." He read his presentation [chuckles] over the phone. I was in a good joking relationship with Dave. Eventually he says, "Do I have the money?"

I said, "You certainly do. In fact, why don't you write them back and see if you can get another \$75,000 for another equipment, and I'll find the money." He laughed, but we got this very new, very fancy piece of small equipment.

I had done a lot of work in the year without--

##

Maslach: So we decided on various things to do for the future of the Computer Center and the future of computing. I had already

received from Mark Christensen the authority to have engineering be the group that taught computing on this campus, for the great unwashed undergraduate population. We just started going full blast. I mean, Stu Lynn is one of those kind of guys that works twenty-four hours a day, literally. He sleeps only about four hours, and he's moving all the time and thinking all the time.

Why I said he was a genius was that he just did not know the computer technical stuff. He knew about financing. He knew about the growth of the computer industry. He knew about the use of the computer as it would become, as it is today. He didn't predict Internet or something like that, but he predicted all kinds of social uses that were just absolutely amazing. I just gave him free rein.

### The Academic Personnel Office

Maslach: Finally, of course, I had the operations of the academic personnel office and kind of overseeing the process of appointments, promotions, etc., which I had been doing as provost. It was kind of interesting to try to increase research activities on this campus. I was able to do a number of things, but nothing stupendous. It was only a short period of two years. I tried to clean up things during those two years. I knew I was going to retire, and I just did not want to start new, big programs.

Those last two years--the first one was very active, but the second one kind of went downhill as far as activities. I actually retired in March. What you do is you make a computation on your retirement benefits and so on, and you can retire essentially so many days before that and still maintain your maximum benefits. So I retired with thirty-four years in the system.

I spent a lot of time that last year, again, doing inputs to the Academic Personnel Manual. That last year, systemwide, they incorporated my work and put out a new Personnel Manual. They didn't dedicate it to me, but [chuckles] I was a key person on many of the changes in that one particular area; namely, faculty appointments and promotions.

I spent a lot of time that last six months, I guess I should say, just going around, talking to people and trying to leave some ideas--not grooming people, but if I were to say, "This is

what I would do," and so on. Tien, of course, was appointed as vice chancellor, and I talked with him at length.

### Al Bowker, Creative Administrator

Maslach: Bowker, as I said, is a seven-, eight-man person sort of administrator. He was the eighth man, really. He had a method of administrating that, as I've always said--low key. He has a technique that I have used and other people I know have used it. It works very well. He spoke in a very low voice. You had to listen, move your chair closer to hear him. It works. It's a technique that a lot of people use.

Mike Heyman was just entirely the opposite. He's Mike, that's all. I mean, he's big, he's an athlete, he's energetic. This is the way he does it--confrontational technique, much more than Al Bowker's technique. But when you really get down to it, and I've said this publicly to people throughout the world, especially in the United States, I kept up with administration of higher education. I would put Al Bowker up with anybody, his career and what he has done, the way he did it.

And second, he knew everything about higher education. He kept in touch. In the fall, he would go back East and talk with people in Washington, New York, and so on. And he would go over to Europe and over to England, which he loves to do. He would touch base with higher education everywhere. He knew always whom to see or whom to visit for a given problem. It was amazing, his memory of these things.

As he told me when we first brought him here, "I don't have any special talents in this regard, but I have experience. I can tell you what will work or what won't work." I looked at him at that time. He had creative ideas. Take that computer business. He went out and surveyed it to make sure we could do something in the field and then said, "Let's do it." So he did have big impact in the curriculum on a variety of areas. We have not had that kind of impact since Al Bowker's day. I think we've become more ossified. The impacts are now coming not from the top level but from the bottom levels, the new assistant professors and changing the curriculum and changing research--working upward--bottom up, rather than top down. Which is good.

Swent: That's interesting.

Maslach: Yes.

Swent: Of course he was here at a very crucial time, also.

Maslach: Oh, yes. The main thing that I always remember, just to show you how dramatic it was: he would point out he had done the research. He said, "Up to this point, we have enough people applying as freshman who are qualified, who come, and we are in steady state. It's exactly steady state for the last seven years." Well, immediately thereafter, [after] making this statement, he noticed that we were going up a steep incline here. Today we're turning away qualified people by the tens of thousands! Statewide, 40,000 people qualified were turned away. We need that new campus, and we need it now. But Al was the one that could see that problem. He saw it long before anybody else, and he worked on it.

This is the kind of leadership I enjoyed. Out of the blue, you get a lecture on freshman admissions. Gee, isn't that wonderful that someone is watching that? And he was.

He got on top of the budget. We used to send money back to Sacramento every year because if we don't use the money, don't appoint people and they don't come or something, so the monies, millions, go back. We got to transfer that money. Some of that money I used in computing and so on. When Bowker came, from then on, the amount of money that we sent back to Sacramento was close to zero. Look how he operated on the budget--much, much more creatively than before. His impact was enormous.

Swent: And he's still here.

Maslach: He's still here. The one thing that bothers me--and this I have known from MIT days and others--the University of California systemwide and campuswide do a lousy job of using the talent of people such as Bowker. I know, I'm sure, that Robert Berdahl does call Bowker, but at MIT they gave their former presidents office space, secretarial help, and so on. They have a wing, and over there, all former, retired presidents are there, with space and talent--people, not just secretaries and computers and so on. It's not a mail drop. They come in, and what the corporation does is ask them to do long-term thinking work, nothing to do with operations. Stay out of operations. You're not in charge any more. But they're picking their brains on long-term work.

Now, I knew these presidents, three of them, personally, well. The University of California--the chancellor leaves, and he's lost. Al's got a little office up there at Evans Hall. That's it. I'm sure he is used to some degree, but I'm saying the way to use him--MIT makes us look stupid, really.

Activities in Retirement: Sailing, Travel, Consulting

Swent: What have you done in your retirement? Have you been used?

Maslach: I've been used to some degree, more by federal committees, and university overhead relations committee used me heavily for a while.

Swent: Overhead relations?

Maslach: Well, the amount of money we get in overhead from the federal government for all our sponsored projects is fixed by a formula. The way we use the formula--for example, Stanford, Princeton, and so on get about 100 percent overhead, and we get today about 52 percent. We were getting, for many years, 27 percent. Something was wrong. We have changed things, but I'm the dinosaur because I signed the first overhead agreement with University of California with the Office of Naval Research, back in 1950, when I was head of that project. And I was chosen because it was the largest ONR project. My name is in the file somewhere in Washington [chuckles].

But then I got to working with the French government on the development of commercial products--industry, research development, the next step. Basically, what I lectured on and worked on for many years is the use of the university--faculty, research--and how you make that transfer. For example, my best example is the chip. Right here at Berkeley, in the early days, much of the research was done--not at Stanford, but at Berkeley.

Swent: The computer chip.

Maslach: The computer chip. That industry employs 400,000 people in the state of California. France would love to have an industry something like that. But it has been a failure for a variety of reasons. But also the Austrian government asked me to work the same way, on development of new products. I kept up my contacts with Saudi Arabia and the development of new universities. Tried to get them to start community colleges, which they are doing maybe now, but it's iffy.

I've kept my input, but I really had a much larger life outside of the university, which is the first year after retirement we designed, with Joe Esherick as the architect, [a home at] Sea Ranch. Next year we had it built, and we've been using it constantly ever since. This was a house in cooperation with Christina, our daughter, and her husband, Phil [Zimbardo]. We are partners in that operation.

We do a lot of traveling. I did a lot--

Swent: You've led Bear Treks [alumni tour groups].

Maslach: Once. No, we do traveling. For example, two days from now I'm over to Hawaii with Doris and one of our children and two of our grandchildren. That will be kind of a fun week. Then we go down to San Diego. Some of Doris's relatives, San Diego Yacht Club, former commodore. Then we've got time in Ixtapa, which we'll be doing--snorkeling. And then we've got three weeks that we're going to be over in Italy. We travel a good deal.

Doris is still heavily enmeshed with rent control, League of Women Voters, etc. She is more tied up than I am [chuckles].

Swent: Who was your Sea Ranch architect?

Maslach: Esherick, Homsey, Dodge & Davis. When they won all those awards, there was a picture of our house as one of the things they had done.

Swent: That has been very gratifying, I'm sure.

Maslach: Oh, yes.

I sail a lot.

Swent: You still sail?

Maslach: Oh, yes. During the good weather, I'm out there every week. In fact, this next month, in three or four weeks, I'll be getting the boat out, paint the bottom, and stuff like that.

Swent: You had to give up your sailing for a while there, didn't you?

Maslach: No. Even with my knee operation--

Swent: But earlier, in your career, didn't you--

Maslach: I gave up racing. I sail on the Bay by myself a lot, and I cruise to different places. It's very nice to just sail away by yourself somewhere and drop an anchor, fix a drink, watch the sun set, fix your supper, and enjoy yourself.

Swent: What kind of boat do you have?

Maslach: It's a thirty-footer. To people that know racing, it's a half-tonner. It's under the international ocean cruising rule. It's a rule that the stern comes almost to a point. It becomes pretty

narrow in the stern. The latest ruling which is used for more ocean racing boats comes with a broad stern, a wide stern. There's a big difference in the two racing rules. This one is an Arpege-class name. It was built in France. It was the hot boat for a number of years back around 1970 to '75, '80. Dufour was the naval architect. It's a very comfortable boat. Sleeps six. You can sail--if you put in extra tanks--and they do sail it to Honolulu, stuff like that.

Swent: Does your family enjoy this with you?

Maslach: Oh, yes. In fact, I just sent a bunch of enlargements to Steve up in Seattle. They're the ones we're going to see over in Hawaii. Pictures of him and his wife and the two kids, sailing the boat. When they came down and visited us months ago, I took the son, Dillon, out to the hallway, where I have pictures mounted. I pointed up a picture I had taken in Eagle Harbor in Bainbridge Island, where they live. The picture is essentially a bunch of small boats tied up to a float, and their sails are half up, half down. It's a very photogenic picture, which I took with a photo lens, long distance. He started stammering. He pointed at one of the boats and said, "I sailed that boat yesterday." [chuckles] He was in a class learning how to sail up there in Bainbridge Island, and that boat, one of about five in the picture, was one he had sailed the day before. He was laughing. It was funny. He was surprised.

We go out to the yacht club quite often. A lot of people out there. You see a lot of people, a lot of retired people, of course. People on either side of me are both retired. One is Irish; one is Scottish. One is MacAfee and the other is MacFay [laughs]. They're all a lot of fun.

Swent: And you've had knee surgery. I understand you were an ideal patient for that.

Maslach: I always am an ideal patient. Every doctor I've ever had has said that about me because I work at it. They tell me to do something, I do it. And I overdo it, if necessary. Now, for example, I'm walking miles every day. People just stare at me. Can't believe it.

Swent: You're in marvelous condition, obviously.

Maslach: Yes. I don't have a knee problem anymore. That's solved. What I do is I have a floating vertebra in my back, L-4, lower back, lumbar four. Floats. And it hits the spinal cord, of course, and therefore I have cramps. L-4 controls essentially, at that area, controls cramping in the calf muscles, so I walk stiffly



until I limber up. But, oh, by nine o'clock I'm in good shape. But then come nine o'clock at night--sitting is not good. Lying flat on your back is the best. One unit pressure on the vertebrae. Standing straight is two units. Sitting is four units, which surprised everybody, but they did the research. And bending over and doing work is eight units, so you want to avoid that.

I got a lot of good ideas from Dr. Elizabeth Kelly, now with the back clinic at Kaiser. You just have to learn how to live with that back. She said, while she waggled her finger at me like a school marm, she said, "It's up to you. You are in control." So I'm in control.

Swent: You know, we've got a few minutes--what about Kaiser? How do you feel about them?

Maslach: If they want to make an advertisement for Kaiser medical, I'll be happy to do it.

Swent: You've seen it through many years.

Maslach: Totally positive. The only negative that you can get out of me is that you have to work the bureaucracy. Just like I laundered money here at the University of California, you have to know how to work their system.

Swent: You're saying that--

Maslach: You just can't sit back and expect them to do it. They're a health maintenance organization, and you have to use them. The way to use them is to actually talk directly with your principal physician--in my case, Dr. Ned Durkin--and you just tell him what's wrong, what's happening, and what you want done. Once they talk with you, the way they would talk to me, why, they know that I am serious about this, so they move ahead. I will tell you right now that the doctors that I've been seeing over the years, every one has been tops. I cannot complain of the medical work.

To get them, though, you have to go to your primary physician. You have to get referred. The bureaucracy on the counter, to get an appointment or on the phone, is essentially the biggest single problem with Kaiser. They've got a phone system which is totally insensitive.

Swent: It's overwhelmed, also.

Maslach: And it's also overwhelmed. It's totally insensitive to the individual. They do review their doctors (I almost said faculty) constantly. The half-a-dozen doctors that I have seen in the last several years, they have sent me a form which I have filled out. It has always been positive, with a few suggestions for improvement. But I really don't have any complaints. And the cost, which is zero at this point, for me--you can't beat it. No, I use it. You have to use it.

It's just like the Academic Senate here at the University of California. If you really want the Senate to do something, you've got to use it. You've got to go to them. You've got to explain it to them. You've got to give them a job. You've got to say, "Look, this is your jurisdiction. You advise me." They do it. They love to do it. But if you just sit in your office and do nothing, forget it. You've got to make it a dynamic operation. That's the whole point.

Well, you've got to get to your faculty--

Swent: Yes. I was going to ask you our customary ending question: in retrospect, how do you feel about it all, but I think we've pretty well--

Maslach: Let me tell a small joke there. There was a man by the name of Richard Powell, who was prominent in chemistry, [a] professor. He was kind of a joker. He would play hearts and sit around there. He says, "One of the things we ought to do at this university is to appoint a committee upon the retirement of a faculty member to determine whether we should have appointed him or not."

Swent: In the first place! [chuckles]

Maslach: Everybody laughed, of course. It was a big joke. But I often would think back about that. I thought to myself, You know, that was a joke, but in many respects, it had a lot of meaning.

But to the individual, me, I should be reviewing what I have done. And as I review my total career--every ten years, changing--I was a professional engineer, I did research in engineering, and then I went into engineering teaching, and then engineering administration, and then higher education administration. That's my career. I think back upon it, and there was nothing I predicted. I never expected it to go that high. I never asked for a job in my life. People always asked me to work and do things. Just like the first professor, Boelter, telling me, "You ought to go to MIT." So I did. I was asked to be provost. I've always been sort of the good soldier

in these things, doing what people asked me to do, but always with an eye to new challenges, new events.

I am an engineer--I'm a problem solver. That's what I am. When Bowker says, "Why don't you take over computing?" How far do I jump, and in what direction? I know now what to do, and so I do it.

Swent: Good at analyzing.

Maslach: Yes. I had my engineering techniques of looking at a problem, how I do it, and so on. As Heyns first and Bowker said you get the best people to work for you. I mean, Stu Lynn--there was not a better computer center director in the United States, period. He's now at Cornell and doing fine work there. He works big internationally. But that's it. He was good. There was no question about it.

Okay? You better get going.

Swent: All right.



## XI EPILOGUE

### On Problem-Solving

[Interview 11: November 10, 1999] ##

Swent: When we stopped several months ago, you were just characterizing yourself as a problem solver, and today we're going to follow up on that subject.

Maslach: Those last words are sort of an opening into what I will call an epilogue.

I don't know when it started, probably when I was about nine years old, and first walked into the main library in San Francisco. Of course the first thing you see in that top big room of that building, which is soon to become the Asian Museum, is this enormous file catalog, just fifty feet long with all these individual drawers, each drawer containing hundreds of cards, and each card representing a book.

Swent: This is what you saw, but you don't see it now.

Maslach: You don't see card catalogs any more [chuckles], but I must admit I just looked at that thing and I started probably at "A" and just began to explore what this was. This was my first contact with a--quote--body of knowledge--unquote. Well, as time went by I just explored through that catalog on subject matters and materials that I didn't know anything about and I would go and get the books. There was a librarian there who recognized me and she would be the one I would give my call card to and get the book from her.

This went on for many years, and I just developed my basic strength of reading. I still read books constantly. In fact, when we finish here, I will go past the Morrison [Reading Room of the] Library and drop in and get a couple of more books. But

this all goes on to the next step, which is of course years later, when I was at the University of California, and coming in as a dean. The big job that Ed Strong gave me--one of three--was to make the engineering curriculum a true curriculum of 120 semester units. Okay: here's a body of knowledge: this is what we want to teach our students; what should it contain? And so we are constructing this body of knowledge to be covered in four years. There are all sorts of constraints in terms of having mathematics, physics, chemistry; having a common lower division so we articulate with the community colleges and the state colleges; but then what do we contribute? You know, here is the main thing.

### The Rise and Fall of Academic Disciplines Necessitates Reorganization

Maslach: And so this was my first brush with dealing with a body of knowledge and working on it and adding things, deleting things, and noticing the rise and fall of various disciplines. And to me this was a wonderful introduction. Fortunately I had a very able chairman of the committee, that did the revision of the curriculum, and I talked about this earlier in the oral history. John Weyhausen was the professor who handled this.

But at this point I became directly and specifically interested in problems which were curricular problems. I kind of thought that this was my weak area as far as being a dean, and so I put more effort into it. Unfortunately my first brush with the curriculum was to wipe out the College of Mining. We were at a desperate situation; we had about four students, and six professors. The need for mining had long since disappeared in the state of California, and we just did not have the students. There are very few schools of mines today; the big ones I can think of are in Colorado and South Dakota. But when I put my name to that paper, wiping out that college, I must say that I probably didn't know what I was doing exactly, and I heard about it from a lot of miners, but it was something we just had to do.

Don McLaughlin for many years would chide me about my wiping out "his" college of mining, because he was the last dean of that college.

It might come as a great surprise to people reading this, electrical engineering was a branch of the department of mechanical engineering. It was not a separate department of its own when I went to the university in the late thirties, early

forties. Only the developments during the war truly developed electronics and the new electrical engineering. In the thirties and forties, electrical engineering was overwhelmingly power development and power distribution. It was the PG&E [Pacific Gas & Electric] type of concepts that were being studied and taught. There were only one or two people who were playing around with electronics, one being Larry Marshall, who talked me into going to the Rad Lab at MIT. Of course, today electrical engineering and computer sciences, a department in engineering, is also one of the largest departments on the campus. For many years, it was the largest department. Now there is one down in the biosciences that is larger in number.

So I was looking at all these changes that were going on. [chuckles] For example, in the curricular changes: the course I taught one time, graphics, was wiped out. We don't teach graphics any more; it can all be done on a small computer with a small program. So I am trying to give you a picture of all these waves of change that go on, and of course you have faculty who are growing older and want to hang on to their particular discipline, and their disciplines are becoming less and less important. Many faculty would come to me and say, I want you to appoint a man who is doing exactly what I am doing. Well, that never happens. You have to use new appointments for new programs.

After seeing the College of Mines wiped out, it was quite a long time before we later saw other changes of this magnitude. For example, just this last year or so, Naval Architecture is no more. It was a three-man department, excellent in the field, but it disappeared for an entirely different reason: namely, a legal decision made by the government of the United States not to participate in a maritime economy. We no longer build ships; they are built in Japan or in Europe. And the need for naval architecture and this discipline has vanished.

So you wonder what is going to happen in all these things. I tried my darnedest to energize these small departments by introducing the concept of double undergraduate majors that allowed these departments to teach undergraduate courses. Usually small departments with very few students teach nothing but graduate work. So materials engineering and mineral technology, for example, which is really an offshoot of mining, was able to contribute in the college undergraduate program.

The reason I am making this epilogue is just the other day I received the minutes of the College of Engineering and I read all of the reports and so on and what you see today is a very large number of students at the undergraduate level who are enrolled in

"engineering science". Well, there is no department of engineering science, but there is a curriculum. And I could just see the handwriting on the wall. Small departments, such as nuclear engineering and maybe mineral technology and materials sciences, which are all engineering sciences in their own right, probably will be amalgamated at some late date into this new program, because each one of them can teach undergraduate courses as well as have their own graduate activity.

So this was the big problem that I was asked to solve and I worked with it all my life since becoming a dean. And it is not just endemic to engineering. These changes are going on everywhere within the university. For example, one of the first things I received when I walked into the provost position, was the report by the School of Forestry and the College of Agricultural Sciences to amalgamate. Here is another reorganization, and why? And I had to sit down with all these faculty members--small groups, large groups, and so on--to find out something about a field I knew nothing about.

So all these changes are constantly going on within the university. I walked here this morning past the South Hall, and I looked up there. That used to be the School of Librarianship; then it went to Library Science, and now it is Library Information Science, something like that. You cannot know what is going to happen next. The entire biosciences area was reorganized in the last several years, something that Rod Park and I started many years ago. That entire area has been reorganized, and I am talking hundreds of faculty in this situation.

It was sort of these problems that you know I handled and worked on and I think probably it is one of the areas where I did some of the most good. I should say the best work that I did was mainly in the reorganization function. (I just read something in the paper about people using words such as "most good".)  
[laughter]

Swent: Environmental science--that is a whole new area.

Maslach: That is a whole new name, but reorganization into a college was important there. But within each of the departments, they are pretty much the way they were: city and regional planning, landscape architecture, and architecture. I was over there at a fund raising dinner type thing the other night when you saw me at the Faculty Club.



### The Importance of the "Hold" Box

Maslach: But I found out very quickly that you could not move too fast on these matters. All sorts of things happen. One of the things I learned very quickly is that if you did not have to make a change, then it's best not to make any change, to just sit back and wait. I used to have a "hold" box on my desk in which I would toss memos, letters, and what have you that I couldn't decide what to do. So rather than precipitously starting something, I would just wait, and it's amazing how often people would solve the problem for me. Time has a way of bringing the real issues up to the top and you would be talking about whole different things and the report that you were looking at and reading did not describe what the fundamental problems were. So I had this reputation of putting things in the hold box and so I would tell people when they called me, "Well, that's an item I'll put into my hold box."

"How long are you going to hold it?"

I said, "Until I have an idea, because I don't know what to do. I simply don't know what to do, and I won't do anything unless I know what to do." So people were very sympathetic with that kind of approach.

Swent: It sounds like an excellent management technique.

Maslach: Well, I developed a lot of these. I would always chide [Chancellor] Tien, you know, the clean desk that he maintains and he has admitted that this was an administrative technique that I passed on to him.

Swent: The "clean desk" technique.

Maslach: That refers to one time that I told him, don't ever read a memo twice. Take action one way or another, or put it in a hold box, but basically, take action, and by that I mean, ask somebody to do research on this, or ask somebody to do something, find out more facts, and so on. Do something; don't just toss it back in the box and wait and shuffle the paper around the next day.

### "It Was a Great Ride"

Maslach: Well, to kind of categorize the whole episode of my oral history, I saw a quotation, a man by the name of Chuck Yeager, who was the

famous test pilot, first man to break the sound barrier. And when I look back at my career, I just come up with the same position that he had: "It was a great ride." [laughter]

In many respects the ending of this oral history was stated by the man at the desk of The Bancroft Library reading room just an hour ago. Remember when I came in he asked for my name and I replied, "Professor Maslach." I thought his response was perfect. He said, "Oh, yes, psychology." So now I have proved my three-stage theory of life where I am now known as the father of Christina, and soon the father of Jamie and the father of Steve.

## TAPE GUIDE--George J. Maslach

## Interview 1: August 20, 1998

Tape 1, Side A	1
Tape 1, Side B	9
Tape 2, Side A	19
Tape 2, Side B	27
Tape 3, Side A	35

## Interview 2: August 27, 1998

Tape 3, Side B	42
Tape 4, Side A	51
Tape 5, Side A	61
Tape 5, Side B	69
Tape 6, Side A	78
Tape 6, Side B	87

## Interview 3: September 29, 1998

Tape 7, Side A	89
Tape 7, Side B	100
Tape 8, Side A	111
Tape 8, Side B	120
Tape 9, Side A	130
Tape 9, Side B not recorded	

## Interview 4: October 6, 1998

Tape 10, Side A	139
Tape 10, Side B	148
Tape 11, Side A	157
Tape 11, Side B	167
Tape 12, Side A	176
Tape 12, Side B not recorded	

## Interview 5: October 20, 1998

Tape 13, Side A	182
Tape 13, Side B	192
Tape 14, Side A	202
Tape 14, Side B	214
Tape 15, Side A	224
Tape 15, Side B not recorded	

## Interview 6: January 19, 1999

Tape 16, Side A	230
Tape 16, Side B	240
Tape 17, Side A	250
Tape 17, Side B	259

## Interview 7: February 4, 1999

Tape 18, Side A	270
Tape 18, Side B	281
Tape 19, Side A	291
Tape 19, Side B	300
Tape 20, Side A	310
Tape 20, Side B	320

## Interview 8: February 18, 1999

Tape 21, Side A	324
Tape 21, Side B	335
Tape 22, Side A	344
Tape 22, Side B	354
Tape 23, Side A	363
Tape 23, Side B not recorded	

## Interview 9: March 4, 1999

Tape 24, Side A	373
Tape 24, Side B	383
Tape 25, Side A	393
Tape 25, Side B	402
Tape 26, Side A	412
Tape 26, Side B	421

## Interview 10: March 18, 1999

Tape 27, Side A	423
Tape 27, Side B	432
Tape 28, Side A	442
Tape 28, Side B	452
Tape 29, Side A	463
Tape 29, Side B not recorded	

## Interview 11: November 10, 1999

Tape 1, Side A	473
Tape 1, Side B not recorded	

## APPENDIX

Maslach family tree	481
College of Engineering, Degrees Earned, 1939-1990	483
Doctoral Degrees Awarded in the College of Engineering, 1943-44 to 1975-76	485
Herb Caen, <u>San Francisco Chronicle</u> , April 23, 1971	486
Photo and headline from "Campus Report," June-July 1972	487
"Jet-Age Professors," from <u>Look</u> magazine, February 23, 1965	488
United States Naval Academy Academic Advisory Board, 1974-75	493
Delegation from the College of Engineering of the University of California, Berkeley, to the People's Republic of China, 1979	499
"History of the UC Berkeley Engineering Alumni Society," from <u>Matrix</u> , December 1978	501



FAMILY OF ANNA MASLACH

Mother Albina Zakrzewska married Franciszek Psczolkowski

Father died in 1905, he was 47 years old, Anna was 12 years old

Mother Remarried to T.Cesarz

Mother died at age 84

CHILDREN

LUCY	died in 1906, 20 years old, pneumonia, Poland	
PEGGY	died in 1985, 98 <sup>1</sup> / <sub>2</sub> years old,	U.S.A.
ANNA	died in 1974, 81 years old,	U.S.A.
JENNY	died in 1986, 91 years old,	U.S.A.
SOPHIE	died in 1979, 71 years old,	Poland
SON	died childbirth,	Poland
SON	died childbirth,	Poland
ROSE	died 2 years old,	Poland
TADEUSZ CESARZ	died in 1986	Poland

Anna Maslach was born May 8, 1893 town of Sosnowiec, Poland. Came to San Francisco, California in 1912 with her sister Jenny. Their uncle Frank Zakrzewski a barber, who had a barber shop on the old Chronicle Building in San Francisco paid for both girls transportation from Poland. Found them a room in a house on Post and Franklin Street. He found them each a job in the alteration department at the White House. Both girls spoke Polish and Russian. Head of the department was Russian.

Anna and Michael had 4 children. Sophie 1914, Michael 1916, Stanley 1918, (died during flu epidemic, 1 week old) and George 1920.

FAMILY OF MICHAEL M. MASLACH

Mother Marianna Golec married John Maslach

Father died in 1896, Michael M. Maslach was 12 years old

Mother died in 1931, Michael M. Maslach was 47 years old

CHILDREN

THOMAS	died in 1965, 84 years old, Poland
ROZALIA	Poland
FRANCIS	died in 1951, 70 years old, U.S.A.
MICHAEL	died in 1957, 72 years old, U.S.A.
KAROLINA	died in 1969, U.S.A.
ALBERT	died in 1942, 48 years old, U.S.A.
JOSEPH	65 " " Poland
FRANZ	died at birth, Poland
CHRISTIAN	died at birth, Poland

Michael M. Maslach was born September 23, 1884 in Rzeszow on a farm southern tip of Poland. When he was 20, he worked on a boat landed in New York 1904. He worked in Oil City Pennsylvania, Chicago, worked at the Eureka Lumber Mill in California 1907. Came to San Francisco in 1912, worked for the Southern Pacific Railroad. In 1913 he met Anna Pszczolkowska and married in November 13, 1913. Worked for the Leighton Cafeterias Chain, went to work for the Federal Government as Maintenance engineer for the Post Office and the Federal Building. Retired age 70 Active as President in 3 Lodges.



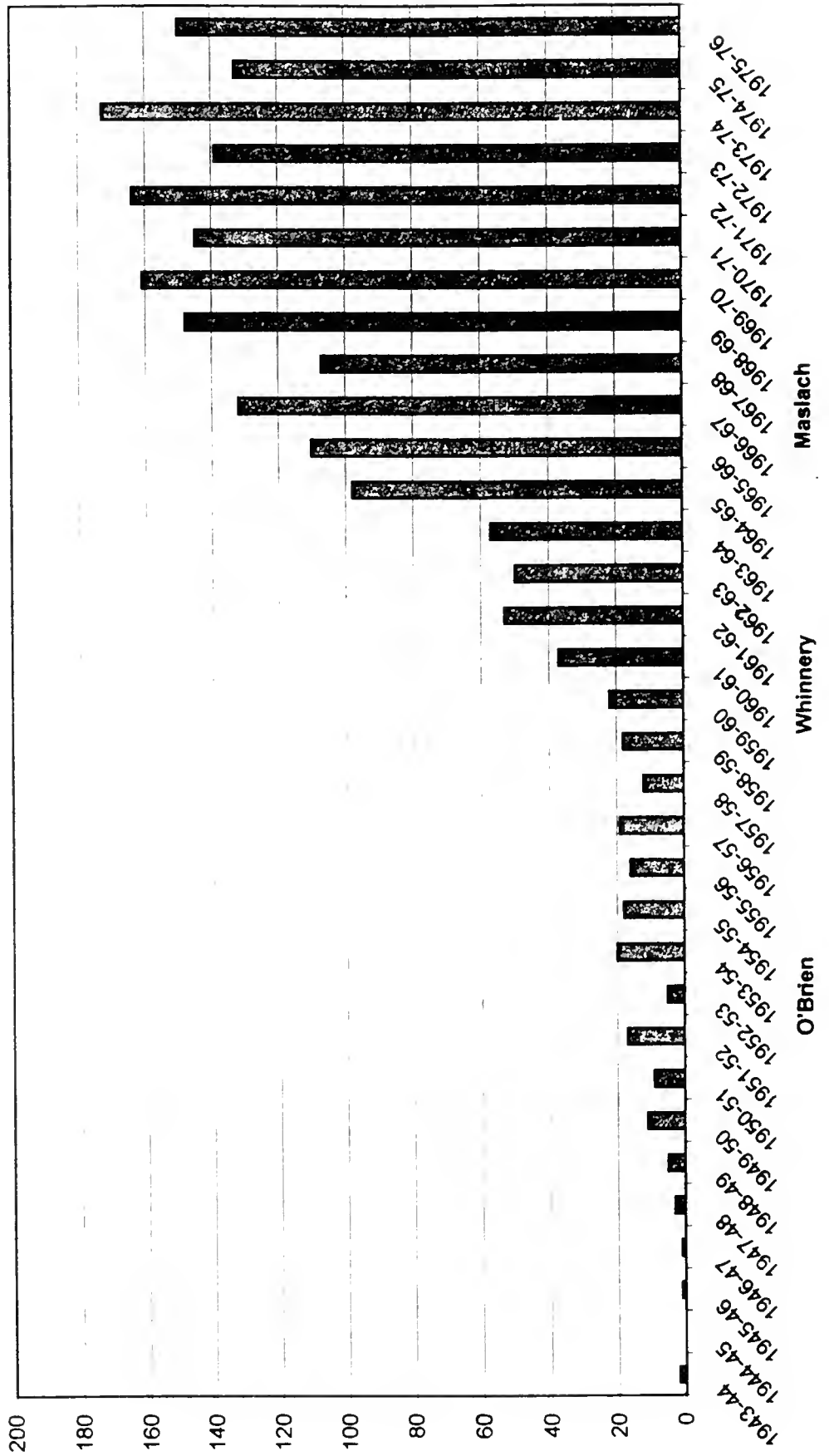
## DEGREES EARNED

CLASS YEAR	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	1946-47	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
	378	357	417	399	197	130	142	398	629	762	901	741	473	391	333	315	415	499	561	525	457	439	446	446	478	472	461	489	393	334	339	398	399	385	417	389	458	492	522	557	559
	34	26	21	7	9	11	18	40	67	66	81	104	95	74	75	87	88	120	146	168	168	216	270	292	332	336	439	445	467	433	395	468	471	463	451	517	507	501	489	476	582
	1	2	2	1	2	0	1	1	3	5	11	9	17	5	20	18	16	19	12	18	22	37	53	50	57	98	110	132	107	148	161	145	164	139	173	133	150	124	137	115	123

**DEGREES EARNED**

CLASS YEAR	TOTAL B.S. DEGREES	TOTAL M.S. DEGREES	TOTAL PH.D. DEGREES
1980-81	605	499	126
1981-82	552	579	128
1982-83	542	443	153
1983-84	518	490	131
1984-85	490	483	127
1985-86	575	445	138
1986-87	626	425	131
1987-88	593	421	170
1988-89	513	419	205
1989-90	588	367	185

# Doctoral Degrees Awarded in the College of Engineering 1943-44 To 1975-76





Fri., Apr. 23, 1971 ☆☆ *San Francisco Chronicle* 23

# HERB CAEN



## How Gritty the Nitty

**ADD INSIDERS:** Why did the Regents' search committee pick Albert Bowker, chancellor of the huge City University of New York (CUNY) to be the new chancellor at UC-Berkeley? Well, for one thing, UC last year dropped to 63rd in the nation in faculty salaries — while CUNY grabbed six spots in the top ten. Chuckles George Maslach, Dean of Engineering at Cal and a member of the search committee: "Don't think we didn't know what we were doing!"

★ ★ ★



JUNE-JULY 1972



Park, left, and Maslach: a reshuffling brought them to the top

Dennis Galloway

Wearing an old campus title, Park and Maslach step into new jobs

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18





Look

February 23,  
1965

*A gathering conflict  
disrupts the dream life of  
America's new elite*

# JET-AGE PROFESSORS



*Heliport is frequent meeting place for Cal faculty.*

AFTER A CENTURY of ridicule and neglect, the American university professor has come upon sweet times. Everyone wants the benefit of his brain—government, industry, foundations and, of course, universities. Their blandishments are glittery: expensive tools, extensive time, intensive travel and excellent pay. Yesterday's tower-bound professor often moonlighted to make ends meet. The jet-age professor, if he's good, can write his own ticket. One who is and does is pictured here.

George Maslach, dean of Berkeley's College of Engineering, is a professor of aeronautical engineering. A colleague calls him "the outstanding experimentalist in the world" in his field, rarefied-gas dynamics. Twice recently, Maslach has turned down "\$50,000 kind of things" from industry because life as he now lives it is too exciting. It's three minutes from his campus office, where he supervises the education of an inordinate number of the nation's better engineering students, to his contemporary home in the hills above, where, from his balcony, the entire Bay Area spreads before him. During the school year, he averages at least one trip a month East as a consultant, and turns an-

other down. During summers and sabbaticals, he jets with his wife and three children to Europe, where he serves on a NATO advisory board. Whatever can be gained from life among the academic elite, George Maslach is getting.

But are students getting what they should from professors like George Maslach? The question dominates academic debate today. Critical educators charge that many professors find research grants and consulting fees so seductive they have all but abandoned teaching. If it's not the professor, it's his university, which, mindful of its reputation, demands that he "publish or perish." Either way, the argument holds, the student loses out. Teaching is frequently shunted to assistants and graduate students. Many undergraduates have only passing contact with the best faculty minds. Students are all but forgotten, says a recent Carnegie Foundation report, in the "headlong search for more and better grants, fatter fees, higher salaries, higher rank." And because Cal's faculty is rated among the top four nationally, the Berkeley campus is invariably cited as the villainous prototype of a "university on the make."

Such abuses dismay Maslach and George Pimentel, the restless, committed chemistry professor pictured on the next page. At Berkeley, it is a matter of policy that even the most venerated

**IN BERKELEY HOME,** *Maslach explains why he turned down two glittery offers from industry. "The living's too good here."*

**AT WASHINGTON CONFERENCE,** *Maslach shares a light break in heavy proceedings.*



# CAMPUS REVOLT

continued

*The choice is not between research and teaching. It is between mediocrity and excellence.*



*Pimentel, 42 and fast, joins students in research-group challenge match. Final score: Macromolecules, 16, Infrared Spectroscopy, 14.*

faculty stars teach undergraduate courses in addition to graduate seminars. It is a matter of honor that professors not let outside work interfere with their teaching, and not accept work that doesn't enhance it. Neither honor nor policy is violated nearly so often as charged. Maslach and Pimentel agree, but each would like to see such violators as do exist sent packing.

Both men make conscious efforts to work with undergraduates. Says Maslach: "If any student thinks enough of me to ask me to advise him, I, by God, am going to respond, even if it takes hours." Pimentel never locks his office door. His students revere him. Says one: "With him, you're a colleague rather than an underling." The author of a popular high-school chemistry textbook, Pimentel learned a few years ago that high-school teachers were counseling their better students to avoid

Berkeley, lest they be lost in the bigness. Pimentel organized a freshman science honors program designed to stimulate talented minds through close faculty-student contact.

In one vital respect, however, both professors find the current criticism specious. To them, there is no choice between research and teaching. The only choice is between mediocrity and excellence. There are few good teachers who don't do research, they contend; most research translates into good teaching. Maslach: "Research and teaching are synonymous words. If you don't do research, you're going to be a trade school." Pimentel: "Research and teaching are like sin and confession. If you don't do any of the former, you don't have anything to talk about in the latter."

Beneath the heat are questions that American universities, already splitting at the seams, must

confront at once: What is a university for should study there? The vision of men like Maslach and Pimentel is as new as the future as medieval Oxford. A university is, all for scholarship, and for students with the y to be scholars. Says Pimentel: "The pringligation of the university is to make su is a place for the very best student. If v do it, nobody else will."

The average student? This year, Masl dicts, Berkeley will suggest to its 20,000 ap that many of them might learn more and pier at one of California's many good colleges. Given the demands of the jet age solution may be unavoidable. "We want a percentage of our population to be going university," says George Pimentel, "but v want the caliber of their education to decli



**PROF. GEORGE PIMENTEL**  
*a member of Berkeley's super chemistry faculty, is investigating atmosphere of Mars. "Research is the reason I'm at the university he says. 'I love to teach, but I wouldn't be here if I couldn't do research.'"*

PRODUCED BY  
LEONARD GROSS

PHOTOGRAPHED BY  
JAMES HANSEN

CAMPUS REVOLT continued

A  
human cry  
behind the speeches:  
"I'M  
HERE."

BY JOHN POPPY LOOK SENIOR EDITOR

WHEN CLASSES started at Berkeley last September, LOOK photographer Paul Fusco and I were on the campus interviewing dozens of professors and administrators. We wanted them to help us illustrate an article about the benefits of California's huge investment in higher education. We asked their help in finding a student who would carry the riches of the university out into the world with him—perhaps a top young scientist who stretched himself in many directions, including the arts, off-campus politics, the coffeehouse scene.

The professors and deans were very cordial. Most gave us lists of honor students. "Now, what is this person like?" we would ask, pointing to a name. Time after time, we heard: "Um . . . you know, I thought I could help you, but I really don't see these people much."

We decided that many teachers had been fooling themselves. Surrounded by 27,500 young people, they thought they knew students.

They knew a name, a face, a grade. But—to their own surprise—knew the human being. Our search went on.

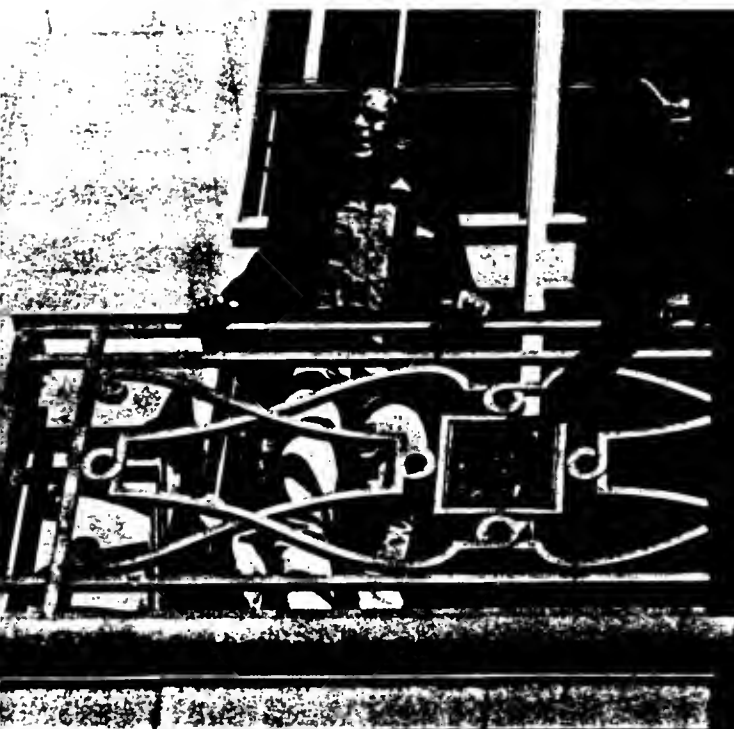
After lunch on September 30, Fusco and I interrupted a toward Sproul Hall (the campus administration building) to a bushy-haired young man mount a chair to harangue a class of students. He was Mario Savio, chairman of campus Friends of a civil-rights group. He and four others had been summoned to the dean's office for breaking university rules against overt political—soliciting funds, recruiting members, organizing off-campus demonstrations—on the campus. Would *all* of you, he asked, follow us to Sproul Hall in a show of solidarity against these unjust rules?

"Huh!" I said to Fusco. "He'll be lucky if he gets a dozen students with him. My college days, he would probably have got none; but today's students are more action-prone, and Berkeley is the most 'political' campus in America, so I gave him a few. At 3 p.m., Savio led a group of students into Sproul Hall, where they staged a 12-hour sit-in to demand the deans to punish them all.

My amazement was soon the amazement of everyone, including professors, administrators, university regents and the nation.

Savio and seven others were suspended from the university. The next day, resentful students set about deliberately breaking the rules. At 11:45 a.m., a dean and a campus policeman told an ex-student to leave an illegal CORE recruiting table in front of Sproul Hall that he was under arrest for trespassing, and led him to a police car. Immediately, several hundred students surrounded the car and sat down. Events of the next 32 hours crystallized a pattern of student action that has lasted into 1965. About 3,000 students converged on Sproul Hall Plaza; several hundred others sat-in in Sproul Hall itself; the roof of the trapped police car became a platform for a stream of orators, with Savio emerging as chief talker. The message of the speeches was simple: The students did not intend to disperse. When the administration removed all restrictions on "free speech," the students returned to the administration removed all restrictions on "free speech."

Non-student Brad Cleaveland (left), author of a pamphlet urging "open, fierce rebellion" at Cal, listens as Mario Savio orates.



In the first days of the Berkeley uprising, UC President Clark Kerr asked, "What's so intellectual about grabbing people by the neck to form a picket line?"

# CAMPUS REVOLT continued

political activity—on campus and pardoned the eight leaders.

Evidently convinced that a small cadre of radicals was manipulating the crowd, the Berkeley administration announced that a mob could not force it to negotiate. California Gov. Edmund G. Brown declared, "This will not be tolerated." Unmoved, the demonstrators stayed through the night and the next day, talking steadily. At dusk, tension in the crowd suddenly became almost Mississippian; more than 500 armed, helmeted policemen were assembling behind Sproul Hall. Students began linking arms.

Concerned faculty members had been trying to mediate between students and administrators. Finally, University of California President Clark Kerr, a former labor arbitrator, decided to reverse the administration's stand. Just after dark, he signed an agreement that elated the rebels. Not only would the cases of the eight suspended students be reconsidered, but a faculty-student-administration committee would be created to study "all aspects of political behavior on campus." The army of police left. The demonstrators dispersed. The captured police car, its roof flattened, drove off. The next day, rebel leaders announced official formation of a "Free Speech Movement."

Since then, the struggle between students and administration has surged back and forth across the Berkeley campus, with an increasingly alarmed faculty trying to make peace. FSM leaders continued to press demands whose details shifted with every clash, but which never departed from two principles. The students want:

1. To use the campus as a base for off-campus political and social action without fear of punishment by the university.
2. To make faculty and students the sole judges of educational policy, reducing administrative officers to housekeepers "raising money, cleaning sidewalks, providing rooms for us to work in," as Savio puts it.

The board of regents—the university's supreme ruling body—agreed with President Kerr's conviction that "we must make sure the university does not become a sanctuary for mounting illegal actions off the campus." The Berkeley faculty, however, was jarred awake by the desperate ugliness of the students' repeated attacks on the administration. In December, the Academic Senate proposed a peace plan that would satisfy almost all FSM demands. Many faculty members admitted that students had voiced complaints before the uprising, but that "nobody was listening."

An apparently simple dispute between activist students and university officials—which everyone in the state would have been relieved to think of as a kind of glorified panty raid—was turning into what sociologist Seymour Martin Lipset and political scientist Paul Seabury (both first-string Berkeley professors) call "the greatest crisis which a major institution of higher learning in America has ever faced."

The crisis is great because students at Berkeley are making unprecedented demands on their elders. Politics and free speech spearhead their protest, but a powerful moral disquiet motivates it. They are asking an old, respectable question: "Just what do you think an education is for?" University presidents and professors have been genteelly asking that of each other for years, and have seemed satisfied with abstract answers that were no answer at all. But now, the questioners are not genteel. And they demand an answer.

Young people like Michael Rossman (and Mario Savio, who temporarily withdrew from the university) do not like the world they live in. They consider it unjust and hypocritical. They have heard too many phony promises from candidates who offer more opportunism than leadership. They have seen the Government they are told to respect caught in deliberate lies, as in the U-2 incident. They know the GNP rose \$40 billion last year; they also know that families still starve. And they see the continuation of Negro inequality as a huge moral evil.

"Where were you when the Jews were taken away?" young Germans ask their fathers. "What are you doing while the Negroes suffer?" these young Americans ask their elders. Dealing in moral terms, not procedural ones, they insist that education is inseparable from action. The civil-rights movement is a moral spur to these students. It has also taught them how to make people stop ignoring them—with the powerful tactics of civil disobedience. Nearly 1,000 students

heeded Savio's call to battle before a December sit-in at Sproul Hall:

"There is a time when the operation of the machine becomes so odious, makes you so sick at heart that you can't even tacitly take part, and you've got to put your bodies upon the gears and upon the wheels, upon the levers, upon all the apparatus, and you've got to make it stop. And you've got to indicate to the people who run it . . . that unless you're free, the machines will be prevented from working at all."

That night, 779 were arrested, and the resulting classroom strike very nearly did stop the machine.

These methods of attack are truly frightening. Some extreme leftists do mingle with the FSM, offering a convenient oversimplification to those who see a Communist plot behind every disorder. More to the point, Professors Lipset and Seabury warn: ". . . The startling incomprehension or indifference shown by some of the best students in the country to the values of due process . . . challenges the very foundations of our democratic order. Instant justice demanded at the point of a gun is no better than instant order. . . . A whole generation may learn that ends justify any means. . . ."

One melancholy sight of the Berkeley disorders has been UC President Clark Kerr, a man trapped by history. Neither Kerr nor the people of California deliberately chose to create a state university that students would revile as an assembly line. All along, he has glimpsed flaws in a multiversity that is, in his own words, ". . . an imperative rather than a reasoned choice among elegant alternatives. . . ." In the 1963 Godkin Lectures at Harvard, Kerr said a student revolt against ". . . lack of faculty concern for teaching, endless rules and requirements and impersonality . . ." would probably force curriculum changes. Undergraduate teaching, he predicted, will have to be "renovated," with the technology already at hand—teaching machines, televised lectures—to free professors for more personal work with students.

As an afterthought: ". . . A few of the 'nonconformists' have another kind of revolt in mind. They seek, instead, to turn the university, on the Latin-American or Japanese models, into a fortress from which they can sally forth with impunity to make their attacks on society."

Kerr may not have foreseen that some of those "nonconformists" would carry forth both kinds of revolt with such passion. The Berkeley rebels have been unreasonable. But they feel justified because they are attacking problems that should have been solved long ago. Like most revolutionaries, they are harsh and inflexible. It should be easier—and more moral—to deal with the problems than with the rebels. **END**

## BUTCH



LOOK 2-23-68

"I hate to be a spoil sport, Butch, but that wasn't a police car after all."



---

UNITED STATES NAVAL ACADEMY

# ACADEMIC ADVISORY BOARD

---



The purpose of the Board is to advise and assist the Superintendent concerning the education of midshipmen. To accomplish this objective, the Board will examine academic policies and practices at the Naval Academy and submit proposals to the Superintendent which will aid him in improving educational standards and in solving academic problems.

1974-75





**DR. GEORGE J. MASLACH, Chairman**

Provost, Professional Schools and Colleges, University of California (Berkeley)  
Graduate of University of California . . . has spent last 19 years at alma mater . . . named professor of aeronautical engineering in 1956 and dean of the College of Engineering in 1964 . . . primary research effort in fields of rarefied gas dynamics and heat transfer, fluid mechanics, and low density aerodynamics facilities . . . consultant to Office of Naval Research, U. S. Department of Commerce Technical Advisory Board, General Electric Company Missile and Space Vehicles Department, and many others . . . member of American Society of Mechanical Engineers.

---



**MR. ROGER S. AHLBRANDT**

Chairman and Chief Executive Officer, Allegheny Ludlum Industries, Inc.  
Graduate of the U. S. Naval Academy (Class of 1934) . . . joined Ludlum Steel Corporation and became district manager, Allegheny Ludlum Steel Corporation, 1939-42 . . . served in U. S. Navy, 1942-1945 and left service as lieutenant commander . . . served as treasurer of Allegheny Ludlum from 1951-1965, became president in 1967 and chief executive officer in 1968 . . . director of the Ajax Forging and Casting, Wallingform Steel, Arnold Engineering, Cormet, and Mellon National Bank and Trust Companies and the Titanium Metals, American True Temper, International Powder Metallurgy, Special Metals, and Hammerhill Paper Corporations . . . trustee of the Dollar Savings Bank and Shadyside Hospital . . . Board of Directors, St. Margaret Memorial Hospital . . . member of the American Iron and Steel Institute, Pennsylvania Society, and Newcomer Society.

---



**MR. THOMAS L. BOARDMAN**

Editor, *Cleveland Press*

Educated at Oberlin College, class of 1930 . . . became a reporter for the *Cleveland Press* in 1939 . . . served in the U. S. Navy, 1941-1945, assigned to demolition work . . . left service as lieutenant commander . . . was labor editor, assistant city editor and editorial writer of the *Cleveland Press* from 1945-1962 . . . from 1962-1966 was editor, *Scripps-Howard Indianapolis Times* . . . returned to the *Cleveland Press* as editor in 1966 . . . is a captain in the U. S. Naval Reserve . . . member of the Greater Cleveland Growth Association chairman, Recreation Board, Shaker Heights, Ohio, 1960-1961; trustee, Cuyahoga County Library, 1957-1962; Sigma Delta Chi; immediate past president, Cleveland Advertising Club; American Society of Editors

---



**DR. JOHN T. BONNER, JR.**

Vice President for Educational Services, The Ohio State University

Educated at the Ohio State University, receiving a Bachelor of Science degree in 1943, the Master of Arts degree in 1946, and the Doctor of Philosophy degree in 1954 . . . served as a captain in the Army during World War II where his decorations included the Purple Heart . . . former president of Bonner, Inc., Realtors, and of Welch-Bonner Insurance, Inc. . . . consultant to all levels of government and various business organizations . . . author, editor or contributor to over 40 books and articles covering the fields of economics, business, finance, student personnel administration and military affairs . . . has served as member of the Board of Governors of the National Institute of Real Estate Brokers, president of the Columbus Sales Executives Club, director of the Columbus Area Chamber of Commerce . . . currently a member of the boards of the American Playwrights Theatre, Association of the United States Army, Salesian Boys' Club of Columbus, and Columbus Council of the Navy League . . . recent honors include the United States Navy Distinguished Public Service Medal, the United States Army Outstanding Civilian Service Medal, and the George Washington Honor Medal of the Freedoms Foundation in Valley Forge.

---



**ADMIRAL ROBERT B. CARNEY, USN (Retired)**

Graduate of the U. S. Naval Academy (class of 1916), received an honorary Doctor of Laws degree in 1955 from Loras College . . . commanded the USS *Denver*, 1942-1943 . . . was chief of staff to Admiral Halsey, 1943-1945 . . . Deputy Chief of Naval Operations, 1946-1950 . . . commanded the Second Fleet in 1950 . . . was Commander-in-Chief, Allied Forces, Southern Europe, 1951-1953 . . . Chief of Naval Operations, 1953-1955 . . . served as chairman of the board, Bath Iron Works, 1956-1967, chairman of the board, Bell Intercontinental, 1960-1963 . . . industrial consultant 1956 . . . member of the Society of Naval Architects and Marine Engineers, Society of Naval Engineers and the Freedoms Foundation . . . received Navy Cross, Distinguished Service





### MR. JOHN D. deBUTTS

Chairman of the Board of Directors, American Telephone and Telegraph Co. Educated at Virginia Military Institute (class of 1936), received his Doctor of Laws degree from Knox College, Northwestern University, in 1966, and Doctor of Laws degree from Loyola University, Chicago, in 1967 . . . served with the Chesapeake and Potomac Telephone Company in various capacities during the period 1936-1962, became operating and engineering director, Chesapeake and Potomac Telephone Company in 1959 . . . worked for the American Telephone and Telegraph Company during the period 1949-1957 . . . became assistant vice president government relations, AT&T, Washington, D.C. in 1957 . . . was general manager, New York Telephone Company, 1958-1959 . . . president and director, Illinois Bell Telephone Company, 1962-1966 . . . executive vice president, AT&T, New York City, 1966-1967 . . . became vice chairman, Board of Directors, AT&T, New York City, 1967 . . . is director of the First National City Bank, New York; chairman of the board, National Junior Achievement . . . honorary trustee, Chicago Museum of Science and Industry, member of the Board of Visitors, Virginia Military Institute, honorary life member, Board of Lay Trustees, Loyola University . . . member of the Western Society of Engineers and the Armed Forces Communications and Electronics Association.



### DR. JOHN S. DICKEY

President Emeritus, Dartmouth College  
Educated at Dartmouth College, 1929, and Harvard Law School, 1932 . . . honorary degrees from Tufts, Middlebury, Amherst, Oberlin, Bowdoin, Rockford, and Williams Colleges and Brown, Wesleyan, Columbia, Harvard, Princeton, Bucknell, Notre Dame, McGill, and Toronto universities . . . assistant to the commissioner, Department of Correction, Massachusetts, 1933-1934 . . . assistant State Department legal advisor and assistant to Assistant Secretary of State Francis B. Sayre, 1934-1936 . . . special assistant to Secretary of State Cordell Hull, 1940 . . . special assistant in office of Nelson A. Rockefeller, Coordinator of Inter-American Affairs 1940-1944 . . . chief, Division of World Trade Intelligence, State Department, 1941 . . . Public Liaison Officer, U. S. Delegation to the San Francisco Conference on the United Nations Charter, 1945 . . . president, Dartmouth College, 1945-1973 . . . Bi-Centennial Professor of Public Affairs, Dartmouth College, 1970 . . . member, Board of Trustees, Rockefeller Foundation and Charles F. Kettering Foundation.



### DR. RICHARD G. FOLSOM

President Emeritus, Rensselaer Polytechnic Institute

Chairman of the 1959 Curriculum Review Board for the Naval Academy, whose recommendations sparked the Academy's "academic revolution" . . . holds degrees from California Institute of Technology . . . recipient of Cal Tech's Alumni Distinguished Service Award . . . one of nation's top authorities in the theory and practice of fluid dynamics . . . member of several scientific societies including the National Academy of Engineers and the Committee on Sonic Booms of the National Academy of Sciences . . . educational affiliations include the Secretary of the Navy's Advisory Board for Educational Requirements, Committee on Organization in Engineering Schools of the Engineering Colleges Administrative Council, and others . . . former director of the Engineering Research Institute and professor of mechanical engineering at the University of Michigan . . . appointed president of RPI in 1958.



### MR. LUCIUS P. GREGG, JR.

Vice President, Personal Banking Department, First National Bank of Chicago  
President, University Finance Corporation

Graduate of the U. S. Naval Academy with distinction (class of 1955), received a Master of Science degree in Aeronautics and Astronautics from the Massachusetts Institute of Technology in 1961 . . . served as a pilot in the Air Force 1955-1965, at present major in Air Force Reserve . . . director, office of research coordination and associate dean of sciences, Northwestern University, 1965-1969 . . . member of National Academy of Sciences Committee on NASA/University Relations, 1967-1969, Board of Trustees, University Research Association (National Accelerator Laboratory), 1967-1969, Universities Organizing Committee for Space Research, 1968-1969; founding member, Board of Governors of Lunar Science Institute, 1968-1970. Is a

member of the National Academy of Sciences Committee on the Role of U. S. Engineering Schools in Foreign Technical Assistance; Panel on Support for Maritime Research and Education, U. S. Maritime Transportation Research Board; Advisory Committee, Academies Council, National Academy of Sciences; Board of Directors, National Conference of Christians and Jews . . . "Outstanding Young Engineer of 1964," Washington Academy of Sciences; "Man of the Year," Service Guild of Evanston, Ill., 1966; One of "Ten Outstanding Young Men of 1966," Chicago Junior Association of Commerce and Industry.

---



### ADMIRAL ISAAC C. KIDD, JR., USN

Chief of Naval Material

Graduate of the U. S. Naval Academy (Class of 1942), National War College (1961) . . . commanded USS *Ellyson*, 1952-1953 and USS *Barry*, 1956-1958 . . . Assistant Head, China-Northeast Asia Strategic Plans and Policy Division, Joint Staff of Commander in Chief, Pacific, 1958-1960 . . . commanded a destroyer division and destroyer squadrons, 1961-1962 . . . Executive Assistant and Senior Aide to the Chief of Naval Operations, 1962-1966 . . . Assistant Chief of Staff for Logistics, Commander in Chief Allied Forces, Southern Europe, 1966-1968 . . . commanded First Fleet, 1969-1970 . . . commanded Sixth Fleet, 1970-1971 . . . received the Distinguished Service Medal, Legion of Merit with two gold stars and the Bronze Star medal with Combat "V".

---



### DR. ROBERT S. LANCASTER

Professor of Political Science, The University of the South

Received his Bachelor of Arts degree from Hampden-Sydney College in 1929, Master of Arts degree from the University of the South in 1934, his Doctor of Philosophy degree from the University of Michigan in 1952 . . . served as an instructor at the Gulf Coast Military Academy, Gulfport Mississippi; Sewanee (Tennessee) Military Academy, 1931-1938, was commandant of cadets, 1941-1943 and instructor from 1946-1949 . . . was admitted to the Virginia bar in 1937 . . . became a member of the faculty of the University of the South in 1949, and served as acting director of development, professor of political science, dean of men, and dean of College of Arts and Science . . . Fullbright lecturer at the College of Arts and Science, Baghdad, Iraq, and the College of Arts and Science and College of Law, Seoul National University, Korea . . . served as lieutenant (j.g.) in the U. S. Naval Reserve, 1943-1946 . . . is co-author of *An Introduction to American Government*, 1954 . . . member of the Fellow International Institute of Arts and Letters, Virginia and Tennessee Bar Associations, Southern Political Science Association, Phi Beta Kappa, Chi Phi, Phi Kappa Phi, Sigma Upsilon, Tau Kappa, Pi Sigma Alpha, Blue Key and Sewanee Civic Association.

---



### MR. F. C. WISER, JR.

President, Trans World Airlines

Education at Lehigh University, U. S. Naval Academy (class of 1944), and Harvard Business School . . . served in the U. S. Navy, 1944-1949 . . . was assistant to the vice president, Container Corporation of America . . . vice president, Pittsburgh Standard Conduit Company . . . vice president, American Airlines . . . president, Northeast Airlines . . . became president, Trans World Airlines in 1969 . . . trustee of the U. S. Naval Academy Foundation . . . member of the Fund Council of the Harvard Business School

---

## BOARD MEMBERSHIP

---

DR. GEORGE J. MASLACH, Chairman  
Provost, Professional Schools and Colleges  
University of California (Berkeley)  
Member since 1966 (July 1975)

MR. ROGER AHLBRANDT  
Chairman and Chief Executive Officer  
Allegheny Ludlum Industries, Inc.  
Member since 1972 (July 1976)

MR. THOMAS L. BOARDMAN  
Editor, Cleveland Press  
Member since 1971 (July 1977)

DR. JOHN T. BONNER, JR.  
Vice President for Educational Services  
The Ohio State University  
Member since 1972 (July 1975)

ADMIRAL ROBERT B. CARNEY, USN (Retired)  
Member since 1971 (July 1978)

MR. JOHN D. deBUTTS  
Chairman of the Board of Directors  
American Telephone and Telegraph Company  
Member since 1971 (July 1978)

DR. JOHN S. DICKEY  
President Emeritus, Dartmouth College  
Member since 1972 (July 1976)

DR. RICHARD G. FOLSOM  
President Emeritus, Rensselaer Polytechnic Institute  
Member since 1966 (July 1975)

MR. LUCIUS P. GREGG, JR.  
Vice President, Personal Banking Department,  
First National Bank of Chicago  
President, University Finance Corporation  
Member since 1971 (July 1978)

ADMIRAL ISAAC C. KIDD, JR., USN  
Chief of Naval Material  
Member since 1972 (July 1976)

DR. ROBERT S. LANCASTER  
Professor of Political Science  
The University of the South  
Member since 1971 (July 1977)

MR. F. C. WISER, JR.  
President, Trans World Airlines  
Member since 1970 (July 1977)



美国  
加州大学贝克莱  
工程学院  
赴华访问团

DELEGATION  
FROM  
THE COLLEGE OF ENGINEERING  
OF  
THE UNIVERSITY OF CALIFORNIA,  
BERKELEY

THE UNITED STATES OF AMERICA  
1979



团长: 乔治麦司拉克

Leader: Provost George J. Maslach  
Aeronautical Engineering



团员: 曼纽白郎某

Member: Professor Manuel Blum  
Associate Chairman  
Computer Science



副团长: 麦克贺布金

Deputy Head: Associate Dean A. M. Hopkin  
Electrical Engineering



团员: 约翰温那瑞

Member: Professor John R. Whinnery  
Electrical Engineering



秘书: 蔡少棠

Secretary: Professor Leon O. Chua  
Electrical Engineering



团员: 当纳彼得生

Member: Professor Donald O. Pederson  
Electrical Engineering



团员: 约瑟派司克

Member: Associate Dean Joseph A. Pask  
Ceramic Engineering



团员: 伊茵芬尼

Member: Professor Iain Finnie  
Mechanical Engineering



团员: 约翰卫豪生

Member: Professor John V. Wehausen  
Chairman of the Department of  
Naval Architecture



团员: 威廉朱威尔

Member: Professor William S. Jewell  
Chairman of the Industrial  
Engineering and Operations  
Research Department

# History of the UC Berkeley



**Past Presidents** Back row, l. to r., Philip Bradley, Andrew C. Marshall, J. Ward Downey, Lou Oppenheim, Ray Lundgren Front row, l. to r., James McCarty (current president), Sam Ruvkun, Clyde Bentley, Dean Kuh



Dean Kuh chats with member of Engineering Alumni Society in Japan

## Past Presidents Engineering Alumni Society

Sam Ruvkun	Jan. 56-Jan. 57
R. O. Brosemer	Jan. 57-Jan. 58
Clyde E. Bentley	Jan. 62-Jan. 63
Francis B. Tobias	Jan. 63-Jan. 64
Robert C. Andresen	Jan. 64-Jan. 65
Norman J. Peterson	Jan. 65-Jan. 66
Edgar O. May	Jan. 66-Jan. 67
Philip Bradley	Jan. 67-Jan. 68
Donald Doughty	Jan. 68-Jan. 69
Donald C. Bentley	July 69-July 71
Andrew Marshall	July 71-July 72
Louis Riggs	July 72-July 73
Victor W. Sauer	July 73-July 74
J. Ward Downey	July 74-July 75
Edgar J. Garbarini	July 75-July 76
Raymond Lundgren	July 76-July 77
Louis H. Oppenheim	July 77-July 78

## Southern California Chapter

Edward K. Rice	Nov. 75-June 77
Robert L. Andresen	July 77-July 78

## Engineering Alumni Society Calendar

Wednesday February 7, 1979	Winter Dinner Meeting
Friday, May 18, 1979	Spring Luncheon
Saturday, June 16, 1979	Commencement Greek Theatre. 1:30 p.m.

## Organization

When the first few College of Engineering alumni met in June of 1955 to organize an Engineering Alumni Society, their goals were wide-ranging, but their chief aim was quite simple. They wanted to "form a strong alumni group which can contribute to the welfare of the engineering colleges"—both Berkeley and UCLA, although UCLA subsequently formed its own group.

The founding of the Society, according to the first recording secretary of the group, was an outgrowth of "a movement among engineering graduates throughout California who felt that upon graduation, their tie with the University and the College of Engineering should not be severed, that the associations and friends made as students should be continued."

The Society actually took shape when a group of 16 engineers was called together by Andres F. Oddstad (C.E. '41) and Dean of the College Morrough P. O'Brien. At the Faculty Club on June 15, 1955, they discussed plans and aims, and during the summer and fall, there were meetings between the temporary officers—Sam Ruvkun had been elected temporary chairman—and members of an already-existing engineering alumni group in Southern California.

As Recording Secretary Eugene Chiado puts it: "In order to direct the energies and best fulfill the wishes and desires of the engineering graduates, one of engineering's most important tools was used—organization." And organization was the order of the day when on December 6, 1955, at International House on the campus a small group of California engineering graduates formed 6 committees: Faculty Liaison, Engineering College Facilities, Student Relations, High School Recruitment, Publicity and Publication, and Membership.

To top off the organizational nature of the first full meeting, Cyril M. Peletz (C.E. '41), Chairman

of the Nominations Committee, gave his report and the slate of officers drawn up by the committee was unanimously approved.

The first Engineering Alumni Society Officers were:

Sam Ruvkun (C.E. '41)	President
Robert O. Brosemer (E.E. '25)	Vice President & Director
Clyde E. Bentley (M.E. '23)	Vice President & Director
Eugene C. Chiado (M.E. '50)	Secretary and Director of Committee on Publicity and Publications
Joel Kitchens (E.E. '48)	Treasurer & Director of Membership Committee

At that organizational meeting, a great many problems of the University, the College, and the profession were aired. Dean L.M.K. Boelter of UCLA, for example, indicated that one of his most pressing problems was maintaining a staff in the light of significant inroads made on the faculty by tempting offers of large salaries. Walter Dreyer (C.E. '16), discussed the nation-wide shortage of engineers.

Some of the Society's stated purposes that night addressed themselves to such specific problems; some were more general.

The alumni, those present thought, could offer advice to the faculty on curriculum. They could help students secure jobs for vacations as well as after graduation. They could provide needy students with scholarships. They could advise students about the different phases of engineering that would be available to them when they graduated. In addition, alumni could help in some way to recruit high school students to attend the University of California College of Engineering.

# Engineering Alumni Society

At the end of Ruvkun's term, there were 128 alumni as active members of the Engineering Alumni Society. The Society was de-activated, however, after the illness and untimely death of the second president, Robert Brosemer, but in 1962, it reformed under the presidency of Clyde E. Bentley. From that time forward, the Society has met regularly. As the organization strengthened and grew, it established chapters of Berkeley engineering alumni in Sacramento, Southern California, and Hawaii. Most recently, a chapter has been formed in Japan.

## The Turning Point

In 1968, the membership figures began to mushroom, and in 1972, contributions began to rise sharply (See figures, these pages.) How did a small Society with modest means turn into the 2500-member Society it is today? Some former presidents were asked that question.

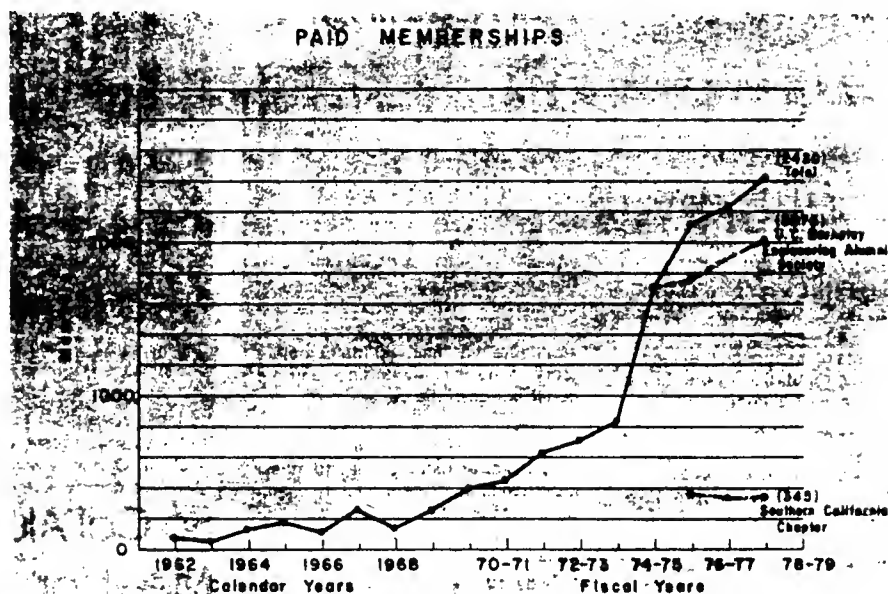
J. Ward Downey praises Don Bentley for acting vigorously during his term to keep the organization alive and growing. "He accomplished this by appointing enthusiastic board members, some with top jobs in industry. These people were able to get fellow alumni to join the Society and start a growth pattern."

Downey himself made what he calls "a small contribution" to growth, too. "It had been customary," he explains, "to send out application blanks to existing and potential members each year asking them to renew or become a new member in the Society. I suggested that an invoice be sent annually to engineering alumni showing the amount of dues payable and space for scholarship contributions. The alumni responded to this ploy favorably and the number of new members increased substantially over the next few years."

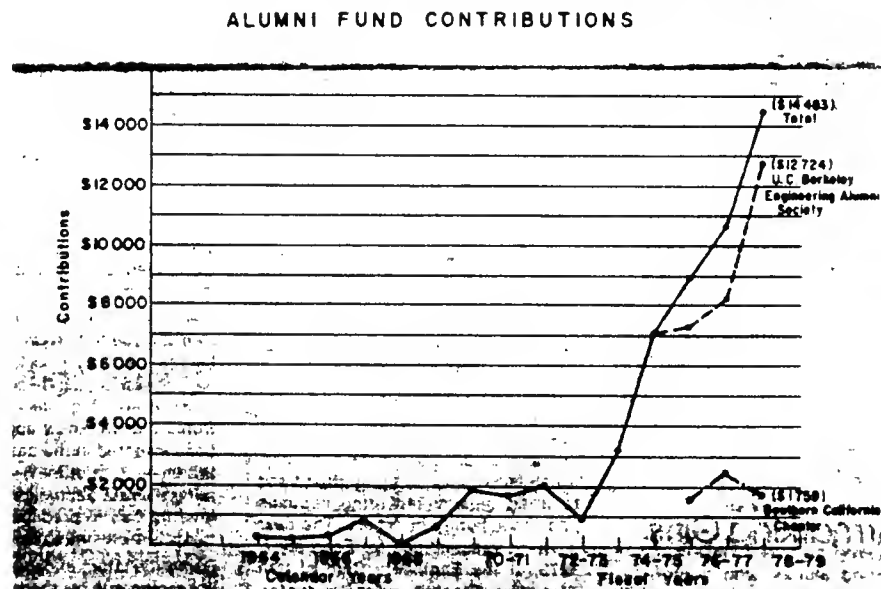
Former President Philip Bradley remembers an administrative problem and a solution. "The problem lay in the lack of continuity from year to year in paperwork and the like, a form of gap between one set of officers and the next. The solution lay in the appearance on the scene of David Brown [1967], and in his appointment by Dean Maslach as a permanent figurative king-bolt around which administrative affairs of the Society became formally centered."

Former presidents themselves had varied reasons for joining the Society in the first place, but many share Ed Garbarini's views. Attending UC, Berkeley, had a major, favorable impact on his life, he feels, and for a long time he "felt in debt to this great institution." His association with the Alumni Society has provided a way for him "to partially repay the debt. He urges others to become involved in the Society's work. Or, as Downey puts it, "If I were to give any advice to the younger engineering alumni, it would be to not wait until one becomes successful before doing something for the University of California."

James McCarty, current Engineering Alumni Society President, says that the main goal for his term is to increase membership to 3000 by June, 1979. He is pleased to report that 80% of that goal has already been accomplished.



Totals do not include complimentary memberships extended to recent graduates.



## Goals Engineering Alumni Society

1. Support the College of Engineering in maintaining its national standing of engineering excellence.
2. Provide a liaison and a system of communication between Faculty, Students, and the Engineering Community.
  - a) Support programs to inform the Engineering and other University Alumni, and Industry as to what the College of Engineering is doing, especially in the areas of new technologies.
3. Assist the College of Engineering in special fund raising campaigns.
4. Raise monies for the Dean's Discretionary Fund, to be used for purposes such as: scholarships, equipment, and continuing education.
5. Stimulate programs to inform the University Faculty and Students as to what the Engineering Alumni are doing.
6. Provide closer interaction between Students and Alumni through support of the Engineering Cooperative Work Study Program.



April 2000

## INTERVIEWS ON THE HISTORY OF THE UNIVERSITY OF CALIFORNIA

Documenting the history of the University of California has been a responsibility of the Regional Oral History Office since the Office was established in 1954. Oral history memoirs with University-related persons are listed below. They have been underwritten by the UC Berkeley Foundation, the Chancellor's Office, University departments, or by extramural funding for special projects. The oral histories, both tapes and transcripts, are open to scholarly use in The Bancroft Library. Bound, indexed copies of the transcripts are available at cost to manuscript libraries.

## UNIVERSITY FACULTY, ADMINISTRATORS, AND REGENTS

Adams, Frank. *Irrigation, Reclamation, and Water Administration*. 1956, 491 pp.

Amerine, Maynard A. *The University of California and the State's Wine Industry*. 1971, 142 pp. (UC Davis professor.)

Amerine, Maynard A. *Wine Bibliographies and Taste Perception Studies*. 1988, 91 pp. (UC Davis professor.)

Bierman, Jessie. *Maternal and Child Health in Montana, California, the U.S. Children's Bureau and WHO, 1926-1967*. 1987, 246 pp.

Bird, Grace. *Leader in Junior College Education at Bakersfield and the University of California*. Two volumes, 1978, 342 pp.

Birge, Raymond Thayer. *Raymond Thayer Birge, Physicist*. 1960, 395 pp.

Blaisdell, Allen C. *Foreign Students and the Berkeley International House, 1928-1961*. 1968, 419 pp.

Blaisdell, Thomas C., Jr. *India and China in the World War I Era; New Deal and Marshall Plan; and University of California, Berkeley*. 1991, 373 pp.

Blum, Henrik. *Equity for the Public's Health: Contra Costa Health Officer; Professor, UC School of Public Health; WHO Fieldworker*. 1999, 425 pp.

Bowker, Albert. *Sixth Chancellor, University of California, Berkeley, 1971-1980; Statistician, and National Leader in the Policies and Politics of Higher Education*. 1995, 274 pp.

- Brown, Delmer M. *Professor of Japanese History, University of California, Berkeley, 1946-1977.* 2000, 410 pp.
- Chaney, Ralph Works. *Paleobotanist, Conservationist.* 1960, 277 pp.
- Chao, Yuen Ren. *Chinese Linguist, Phonologist, Composer, and Author.* 1977, 242 pp.
- Constance, Lincoln. *Versatile Berkeley Botanist: Plant Taxonomy and University Governance.* 1987, 362 pp.
- Corley, James V. *Serving the University in Sacramento.* 1969, 143 pp.
- Cross, Ira Brown. *Portrait of an Economics Professor.* 1967, 128 pp.
- Cruess, William V. *A Half Century in Food and Wine Technology.* 1967, 122 pp.
- Davidson, Mary Blossom. *The Dean of Women and the Importance of Students.* 1967, 79 pp.
- Davis, Harmer. *Founder of the Institute of Transportation and Traffic Engineering.* 1997, 173 pp.
- DeMars, Vernon. *A Life in Architecture: Indian Dancing, Migrant Housing, Telesis, Design for Urban Living, Theater, Teaching.* 1992, 592 pp.
- Dennes, William R. *Philosophy and the University Since 1915.* 1970, 162 pp.
- Donnelly, Ruth. *The University's Role in Housing Services.* 1970, 129 pp.
- Ebright, Carroll "Ky". *California Varsity and Olympics Crew Coach.* 1968, 74 pp.
- Eckbo, Garrett. *Landscape Architecture: The Profession in California, 1935-1940, and Telesis.* 1993, 103 pp.
- Elberg, Sanford S. *Graduate Education and Microbiology at the University of California, Berkeley, 1930-1989.* 1990, 269 pp.
- Erdman, Henry E. *Agricultural Economics: Teaching, Research, and Writing, University of California, Berkeley, 1922-1969.* 1971, 252 pp.
- Esherick, Joseph. *An Architectural Practice in the San Francisco Bay Area, 1938-1996.* 1996, 800 pp.
- Evans, Clinton W. *California Athlete, Coach, Administrator, Ambassador.* 1968, 106 pp.

- Foster, Herbert B. *The Role of the Engineer's Office in the Development of the University of California Campuses.* 1960, 134 pp.
- Gardner, David Pierpont. *A Life in Higher Education: Fifteenth President of the University of California, 1983-1992.* 1997, 810 pp.
- Grether, Ewald T. *Dean of the UC Berkeley Schools of Business Administration, 1943-1961; Leader in Campus Administration, Public Service, and Marketing Studies; and Forever a Teacher.* 1993, 1069 pp.
- Hagar, Ella Barrows. *Continuing Memoirs: Family, Community, University.* (Class of 1919, daughter of University President David P. Barrows.) 1974, 272 pp.
- Hamilton, Brutus. *Student Athletics and the Voluntary Discipline.* 1967, 50 pp.
- Harding, Sidney T. *A Life in Western Water Development.* 1967, 524 pp.
- Harris, Joseph P. *Professor and Practitioner: Government, Election Reform, and the Votomatic.* 1983, 155 pp.
- Hays, William Charles. *Order, Taste, and Grace in Architecture.* 1968, 241 pp.
- Heller, Elinor Raas. *A Volunteer in Politics, in Higher Education, and on Governing Boards.* Two volumes, 1984, 851 pp.
- Helmholz, A. Carl. *Physics and Faculty Governance at the University of California Berkeley, 1937-1990.* 1993, 387 pp.
- Heyman, Ira Michael. (In process.) *Professor of Law and Berkeley Chancellor, 1980-1990.*
- Heyns, Roger W. *Berkeley Chancellor, 1965-1971: The University in a Turbulent Society.* 1987, 180 pp.
- Hildebrand, Joel H. *Chemistry, Education, and the University of California.* 1962, 196 pp.
- Huff, Elizabeth. *Teacher and Founding Curator of the East Asiatic Library: from Urbana to Berkeley by Way of Peking.* 1977, 278 pp.
- Huntington, Emily. *A Career in Consumer Economics and Social Insurance.* 1971, 111 pp.
- Hutchison, Claude B. *The College of Agriculture, University of California, 1922-1952.* 1962, 524 pp.
- Jenny, Hans. *Soil Scientist, Teacher, and Scholar.* 1989, 364 pp.

- Johnston, Marguerite Kulp, and Joseph R. Mixer. *Student Housing, Welfare, and the ASUC*. 1970, 157 pp.
- Jones, Mary C. *Harold S. Jones and Mary C. Jones, Partners in Longitudinal Studies*. 1983, 154 pp.
- Joslyn, Maynard A. *A Technologist Views the California Wine Industry*. 1974, 151 pp.
- Kasimatis, Amandus N. *A Career in California Viticulture*. 1988, 54 pp. (UC Davis professor.)
- Kendrick, James B. Jr. *From Plant Pathologist to Vice President for Agricultural and Natural Resources, University of California, 1947-1986*. 1989, 392 pp.
- Kingman, Harry L. *Citizenship in a Democracy*. (Stiles Hall, University YMCA.) 1973, 292 pp.
- Koll, Michael J. *The Lair of the Bear and the Alumni Association, 1949-1993*. 1993, 387 pp.
- Kragen, Adrian A. *A Law Professor's Career: Teaching, Private Practice, and Legislative Representation, 1934 to 1989*. 1991, 333 pp.
- Kroeber-Quinn, Theodora. *Timeless Woman, Writer and Interpreter of the California Indian World*. 1982, 453 pp.
- Landreth, Catherine. *The Nursery School of the Institute of Child Welfare of the University of California, Berkeley*. 1983, 51 pp.
- Langelier, Wilfred E. *Teaching, Research, and Consultation in Water Purification and Sewage Treatment, University of California at Berkeley, 1916-1955*. 1982, 81 pp.
- Lehman, Benjamin H. *Recollections and Reminiscences of Life in the Bay Area from 1920 Onward*. 1969, 367 pp.
- Lenzen, Victor F. *Physics and Philosophy*. 1965, 206 pp.
- Leopold, Luna. *Hydrology, Geomorphology, and Environmental Policy: U.S. Geological Survey, 1950-1972, and the UC Berkeley, 1972-1987*. 1993, 309 pp.
- Lessing, Ferdinand D. *Early Years*. (Professor of Oriental Languages.) 1963, 70 pp.
- McGauhey, Percy H. *The Sanitary Engineering Research Laboratory: Administration, Research, and Consultation, 1950-1972*. 1974, 259 pp.
- McCaskill, June. *Herbarium Scientist, University of California, Davis*. 1989, 83 pp. (UC Davis professor.)

- McLaughlin, Donald. *Careers in Mining Geology and Management, University Governance and Teaching*. 1975, 318 pp.
- Maslach, George J. *Aeronautical Engineer, Professor, Dean of the College of Engineering, Provost for Professional Schools and Colleges, Vice Chancellor for Research and Academic Affairs, University of California, Berkeley, 1949 to 1983*. 2000, 523 pp.
- May, Henry F. *Professor of American Intellectual History, University of California, Berkeley, 1952-1980*. 1999, 218 pp.
- Merritt, Ralph P. *After Me Cometh a Builder, the Recollections of Ralph Palmer Merritt*. 1962, 137 pp. (UC Rice and Raisin Marketing.)
- Metcalf, Woodbridge. *Extension Forester, 1926-1956*. 1969, 138 pp.
- Meyer, Karl F. *Medical Research and Public Health*. 1976, 439 pp.
- Miles, Josephine. *Poetry, Teaching, and Scholarship*. 1980, 344 pp.
- Mitchell, Lucy Sprague. *Pioneering in Education*. 1962, 174 pp.
- Morgan, Elmo. *Physical Planning and Management: Los Alamos, University of Utah, University of California, and AID, 1942-1976*. 1992, 274 pp.
- Neuhaus, Eugen. *Reminiscences: Bay Area Art and the University of California Art Department*. 1961, 48 pp.
- Newell, Pete. *UC Berkeley Athletics and a Life in Basketball: Coaching Collegiate and Olympic Champions; Managing, Teaching, and Consulting in the NBA, 1935-1995*. 1997, 470 pp.
- Newman, Frank. *Professor of Law, University of California, Berkeley, 1946-present, Justice, California Supreme Court, 1977-1983*. 1994, 336 pp. (Available through California State Archives.)
- Neylan, John Francis. *Politics, Law, and the University of California*. 1962, 319 pp.
- Nyswander, Dorothy B. *Professor and Activist for Public Health Education in the Americas and Asia*. 1994, 318 pp.
- O'Brien, Morrough P. *Dean of the College of Engineering, Pioneer in Coastal Engineering, and Consultant to General Electric*. 1989, 313 pp.
- Olmo, Harold P. *Plant Genetics and New Grape Varieties*. 1976, 183 pp. (UC Davis professor.)
- Ough, Cornelius. *Recollections of an Enologist, University of California, Davis, 1950-1990*. 1990, 66 pp.

- Pepper, Stephen C. *Art and Philosophy at the University of California, 1919-1962*. 1963, 471 pp.
- Pitzer, Kenneth. *Chemist and Administrator at UC Berkeley, Rice University, Stanford University, and the Atomic Energy Commission, 1935-1997*. 1999, 558 pp.
- Porter, Robert Langley. *Physician, Teacher and Guardian of the Public Health*. 1960, 102 pp. (UC San Francisco professor.)
- Reeves, William. *Arbovirologist and Professor, UC Berkeley School of Public Health*. 1993, 686 pp.
- Revelle, Roger. *Oceanography, Population Resources and the World*. 1988. (UC San Diego professor.) (Available through Archives, Scripps Institute of Oceanography, University of California, San Diego, La Jolla, California 92093.)
- Riasanovsky, Nicholas V. *Professor of Russian and European Intellectual History, University of California, Berkeley, 1957-1997*. 1998, 310 pp.
- Richardson, Leon J. *Berkeley Culture, University of California Highlights, and University Extension, 1892-1960*. 1962, 248 pp.
- Robb, Agnes Roddy. *Robert Gordon Sproul and the University of California*. 1976, 134 pp.
- Roszbach, Charles Edwin. *Artist, Mentor, Professor, Writer*. 1987, 157 pp.
- Schnier, Jacques. *A Sculptor's Odyssey*. 1987, 304 pp.
- Schorske, Carl E. *Intellectual Life, Civil Libertarian Issues, and the Student Movement at the University of California, Berkeley, 1960-1969*. 2000, 203 pp.
- Scott, Geraldine Knight. *A Woman in Landscape Architecture in California, 1926-1989*. 1990, 235 pp.
- Shields, Peter J. *Reminiscences of the Father of the Davis Campus*. 1954, 107 pp.
- Sproul, Ida Wittschen. *The President's Wife*. 1981, 347 pp.
- Stampp, Kenneth M. *Historian of Slavery, the Civil War, and Reconstruction, University of California, Berkeley, 1946-1983*. 1998, 310 pp.
- Stern, Milton. *The Learning Society: Continuing Education at NYU, Michigan, and UC Berkeley, 1946-1991*. 1993, 292 pp.

- Stevens, Frank C. *Forty Years in the Office of the President, University of California, 1905-1945.* 1959, 175 pp.
- Stewart, George R. *A Little of Myself.* (Author and UC Professor of English.) 1972, 319 pp.
- Stripp, Fred S. Jr. *University Debate Coach, Berkeley Civic Leader, and Pastor.* 1990, 75 pp.
- Strong, Edward W. *Philosopher, Professor, and Berkeley Chancellor, 1961-1965.* 1992, 530 pp.
- Struve, Gleb. (In process.) Professor of Slavic Languages and Literature.
- Taylor, Paul Schuster.  
Volume I: *Education, Field Research, and Family*, 1973, 342 pp.  
Volume II and Volume III: *California Water and Agricultural Labor*, 1975, 519 pp.
- Thygeson, Phillips. *External Eye Disease and the Proctor Foundation.* 1988, 321 pp. (UC San Francisco professor.) (Available through the Foundation of the American Academy of Ophthalmology.)
- Tien, Chang-Lin. (In process.) Berkeley Chancellor, 1990-1997.
- Towle, Katherine A. *Administration and Leadership.* 1970, 369 pp.
- Townes, Charles H. *A Life in Physics: Bell Telephone Laboratories and WWII, Columbia University and the Laser, MIT and Government Service; California and Research in Astrophysics.* 1994, 691 pp.
- Underhill, Robert M. *University of California: Lands, Finances, and Investments.* 1968, 446 pp.
- Vaux, Henry J. *Forestry in the Public Interest: Education, Economics, State Policy, 1933-1983.* 1987, 337 pp.
- Wada, Yori. *Working for Youth and Social Justice: The YMCA, the University of California, and the Stulsaft Foundation.* 1991, 203 pp.
- Waring, Henry C. *Henry C. Waring on University Extension.* 1960, 130 pp.
- Wellman, Harry. *Teaching, Research and Administration, University of California, 1925-1968.* 1976, 259 pp.
- Wessels, Glenn A. *Education of an Artist.* 1967, 326 pp.
- Westphal, Katherine. *Artist and Professor.* 1988, 190 pp. (UC Davis professor.)

- Whinnery, John. *Researcher and Educator in Electromagnetics, Microwaves, and Optoelectronics, 1935-1995; Dean of the College of Engineering, UC Berkeley, 1950-1963.* 1996, 273 pp.
- Wiegel, Robert L. *Coastal Engineering: Research, Consulting, and Teaching, 1946-1997.* 1997, 327 pp.
- Williams, Arleigh. *Dean of Students Arleigh Williams: The Free Speech Movement and the Six Years' War, 1964-1970.* 1990, 329 pp.
- Williams, Arleigh and Betty H. Neely. *Disabled Students' Residence Program.* 1987, 41 pp.
- Wilson, Garff B. *The Invisible Man, or, Public Ceremonies Chairman at Berkeley for Thirty-Five Years.* 1981, 442 pp.
- Winkler, Albert J. *Viticultural Research at UC Davis, 1921-1971.* 1973, 144 pp.
- Woods, Baldwin M. *University of California Extension.* 1957, 102 pp.
- Wurster, William Wilson. *College of Environmental Design, University of California, Campus Planning, and Architectural Practice.* 1964, 339 pp.

#### MULTI-INTERVIEWEE PROJECTS

- Blake Estate Oral History Project.* 1988, 582 pp.  
Architects landscape architects, gardeners, presidents of UC document the history of the UC presidential residence. Includes interviews with Mai Arbegast, Igor Blake, Ron and Myra Brocchini, Toichi Domoto, Eliot Evans, Tony Hail, Linda Haymaker, Charles Hitch, Flo Holmes, Clark and Kay Kerr, Gerry Scott, George and Helena Thacher, Walter Vodden, and Norma Willer.
- Centennial History Project, 1954-1960.* 329 pp.  
Includes interviews with George P. Adams, Anson Stiles Blake, Walter C. Blasdale, Joel H. Hildebrand, Samuel J. Holmes, Alfred L. Kroeber, Ivan M. Linforth, George D. Louderback, Agnes Fay Morgan, and William Popper. (Bancroft Library use only.)
- Thomas D. Church, Landscape Architect.* Two volumes, 1978, 803 pp.  
Volume I: Includes interviews with Theodore Bernardi, Lucy Butler, June Meehan Campbell, Louis De Monte, Walter Doty, Donn Emmons, Floyd Gerow, Harriet Henderson, Joseph Howland, Ruth Jaffe, Burton Litton, Germano Milano, Miriam Pierce, George Rockrise, Robert Royston, Geraldine Knight Scott, Roger Sturtevant, Francis Violich, and Harold Watkin.  
Volume II: Includes interviews with Maggie Baylis, Elizabeth Roberts Church, Robert Glasner, Grace Hall, Lawrence Halprin, Proctor Mellquist, Everitt Miller, Harry Sanders, Lou Schenone, Jack Stafford, Goodwin Steinberg, and Jack Wagstaff.



*Interviews with Dentists.* (Dental History Project, University of California, San Francisco.) 1969, 1114 pp. Includes interviews with Dickson Bell, Reuben L. Blake, Willard C. Fleming, George A. Hughes, Leland D. Jones, George F. McGee, C. E. Rutledge, William B. Ryder, Jr., Herbert J. Samuels, Joseph Sciutto, William S. Smith, Harvey Stallard, George E. Steninger, and Abraham W. Ward. (Bancroft Library use only.)

*Julia Morgan Architectural History Project.* Two volumes, 1976, 621 pp.  
 Volume I: *The Work of Walter Steilberg and Julia Morgan, and the Department of Architecture, UCB, 1904-1954.*  
 Includes interviews with Walter T. Steilberg, Robert Ratcliff, Evelyn Paine Ratcliff, Norman L. Jensen, John E. Wagstaff, George C. Hodges, Edward B. Hussey, and Warren Charles Perry.

Volume II: *Julia Morgan, Her Office, and a House.*  
 Includes interviews with Mary Grace Barron, Kirk O. Rowlands, Norma Willer, Quintilla Williams, Catherine Freeman Nimitz, Polly Lawrence McNaught, Hettie Belle Marcus, Bjarne Dahl, Bjarne Dahl, Jr., Morgan North, Dorothy Wormser Coblentz, and Flora d'Ille North.

*The Prytaneans: An Oral History of the Prytanean Society and its Members.* (Order from Prytanean Society.)  
 Volume I: 1901-1920, 1970, 307 pp.  
 Volume II: 1921-1930, 1977, 313 pp.  
 Volume III: 1931-1935, 1990, 343 pp.

*Six Weeks in Spring, 1985: Managing Student Protest at UC Berkeley.* 887 pp. Transcripts of sixteen interviews conducted during July-August 1985 documenting events on the UC Berkeley campus in April-May 1985 and administration response to student activities protesting university policy on investments in South Africa. Interviews with: Ira Michael Heyman, chancellor; Watson Laetsch, vice chancellor; Roderic Park, vice chancellor; Ronald Wright, vice chancellor; Richard Hafner, public affairs officer; John Cummins and Michael R. Smith, chancellor's staff; Patrick Hayashi and B. Thomas Travers, undergraduate affairs; Mary Jacobs, Hal Reynolds, and Michelle Woods, student affairs; Derry Bowles, William Foley, Joseph Johnson, and Ellen Stetson, campus police. (Bancroft Library use only.)

*Robert Gordon Sproul Oral History Project.* Two volumes, 1986, 904 pp. Includes interviews with thirty-five persons who knew him well: Horace M. Albright, Stuart LeRoy Anderson, Katherine Connick Bradley, Franklin M. "Dyke" Brown, Ernest H. Burness, Natalie Cohen, Paul A. Dodd, May Dornin, Richard E. Erickson, Walter S. Frederick, David P. Gardner, Marion Sproul Goodin, Vernon L. Goodin, Louis H. Heilbron, Robert S. Johnson, Clark Kerr, Adrian A. Kragen, Mary Blumer Lawrence, Stanley E. McCaffrey, Dean McHenry, Donald H. McLaughlin, Kendric Morrish, Marion Morrish, William Penn Mott, Jr., Herman Phleger, John B. deC. M. Saunders, Carl W.

Sharsmith, John A. Sproul, Robert Gordon Sproul, Jr., Wallace Sterling, Wakefield Taylor, Robert M. Underhill, Eleanor L. Van Horn, Garff B. Wilson, and Pete L. Yzaguirre.

*The University of California during the Presidency of David P. Gardner, 1983-1992.* (In process.)

Interviews with members of the university community and state government officials.

*The Women's Faculty Club of the University of California at Berkeley, 1919-1982.* 1983, 312 pp.

Includes interviews with Josephine Smith, Margaret Murdock, Agnes Robb, May Dornin, Josephine Miles, Gudveig Gordon-Britland, Elizabeth Scott, Marian Diamond, Mary Ann Johnson, Eleanor Van Horn, and Katherine Van Valer Williams.

#### UC BERKELEY BLACK ALUMNI ORAL HISTORY PROJECT

Broussard, Allen. *A California Supreme Court Justice Looks at Law and Society, 1969-1996.* 1997, 266 pp.

Ferguson, Lloyd Noel. *Increasing Opportunities in Chemistry, 1936-1986.* 1992, 74 pp.

Gordon, Walter A. *Athlete, Officer in Law Enforcement and Administration, Governor of the Virgin Islands.* Two volumes, 1980, 621 pp.

Jackson, Ida. *Overcoming Barriers in Education.* 1990, 80 pp.

Patterson, Charles. *Working for Civic Unity in Government, Business, and Philanthropy.* 1994, 220 pp.

Pittman, Tarea Hall. *NAACP Official and Civil Rights Worker.* 1974, 159 pp.

Poston, Marvin. *Making Opportunities in Vision Care.* 1989, 90 pp.

Rice, Emmett J. *Education of an Economist: From Fulbright Scholar to the Federal Reserve Board, 1951-1979.* 1991, 92 pp.

Rumford, William Byron. *Legislator for Fair Employment, Fair Housing, and Public Health.* 1973, 152 pp.

Williams, Archie. *The Joy of Flying: Olympic Gold, Air Force Colonel, and Teacher.* 1993, 85 pp.

Wilson, Lionel. *Attorney, Judge, Oakland Mayor.* 1992, 104 pp.

UC BERKELEY CLASS OF 1931 ENDOWMENT SERIES, UNIVERSITY OF CALIFORNIA,  
SOURCE OF COMMUNITY LEADERS (OUTSTANDING ALUMNI)

- Bennett, Mary Woods (class of 1931). *A Career in Higher Education: Mills College 1935-1974*. 1987, 278 pp.
- Bridges, Robert L. (class of 1930). *Sixty Years of Legal Advice to International Construction Firms; Thelen, Marrin, Johnson and Bridges, 1933-1997*, 1998, 134 pp.
- Browne, Alan K. (class of 1931). *"Mr. Municipal Bond": Bond Investment Management, Bank of America, 1929-1971*. 1990, 325 pp.
- Coliver, Edith (class of 1943). (In process.) Foreign aid specialist.
- Dettner, Anne Degruchy Low-Beer (class of 1926). *A Woman's Place in Science and Public Affairs, 1932-1973*. 1996, 260 pp.
- Devlin, Marion (class of 1931). *Women's News Editor: Vallejo Times-Herald, 1931-1978*. 1991, 157 pp.
- Hassard, H. Howard (class of 1931). *The California Medical Association, Medical Insurance, and the Law, 1935-1992*. 1993, 228 pp.
- Hedgpeth, Joel (class of 1931). *Marine Biologist and Environmentalist: Pycnogonids, Progress, and Preserving Bays, Salmon, and Other Living Things*. 1996, 319 pp.
- Heilbron, Louis (class of 1928). *Most of a Century: Law and Public Service, 1930s to 1990s*. 1995, 397 pp.
- Kay, Harold (class of 1931). *A Berkeley Boy's Service to the Medical Community of Alameda County, 1935-1994*. 1994, 104 pp.
- Kragen, Adrian A. (class of 1931). *A Law Professor's Career: Teaching, Private Practice, and Legislative Representative, 1934 to 1989*. 1991, 333 pp.
- Peterson, Rudolph (class of 1925). *A Career in International Banking with the Bank of America, 1936-1970, and the United Nations Development Program, 1971-1975*. 1994, 408 pp.
- Stripp, Fred S. Jr. (class of 1932). *University Debate Coach, Berkeley Civic Leader, and Pastor*. 1990, 75 pp.
- Trefethen, Eugene (class of 1930). *Kaiser Industries, Trefethen Vineyards, the University of California, and Mills College, 1926-1997*. 1997, 189 pp.

## UC BERKELEY ALUMNI DISCUSS THE UNIVERSITY

Griffiths, Farnham P. (class of 1906). *The University of California and the California Bar*. 1954, 46 pp.

Ogg, Robert Danforth (class of 1941). *Business and Pleasure: Electronics, Anchors, and the University of California*. 1989, 157 pp.

Olney, Mary McLean (class of 1895). *Oakland, Berkeley, and the University of California, 1880-1895*. 1963, 173 pp.

Selvin, Herman F. (class of 1924). *The University of California and California Law and Lawyers, 1920-1978*. 1979, 217 pp.

Shurtleff, Roy L. (class of 1912). *The University's Class of 1912, Investment Banking, and the Shurtleff Family History*. 1982, 69 pp.

Stewart, Jessie Harris (class of 1914). *Memories of Girlhood and the University*. 1978, 70 pp.

Witter, Jean C. (class of 1916). *The University, the Community, and the Lifeblood of Business*. 1968, 109 pp.

## DONATED ORAL HISTORY COLLECTION

Almy, Millie. *Reflections of Early Childhood Education: 1934-1994*. 1997, 89 pp.

*Cal Band Oral History Project*. An ongoing series of interviews with Cal Band members and supporters of Cal spirit groups. (University Archives, Bancroft Library use only.)

Crooks, Afton E. *On Balance, One Woman's Life and View of University of California Management, 1954-1990: An Oral History Memoir of the Life of Afton E. Crooks*. 1994, 211 pp.

Weaver, Harold F. *Harold F. Weaver, California Astronomer*. 1993, 165 pp.

## INDEX--George J. Maslach

- Adams, Charles Francis, 151-154  
aerodynamics, research and design,  
223-224, 231-237, 240, 270  
Agnew, Spiro, 459  
Air Force, United States, 184,  
191, 240, 297, 396  
air pollution, 336-338, 382  
Alvarez, Luis, 144-145, 160, 165,  
376  
American Institute of Chemical  
Engineers, 229-230  
American Society of Engineering  
Education, 243  
Anderson, Roxanne, 193-194  
Andreasen, Bob, 318-319  
Andrews, Bill, 41, 52-54, 80-81,  
90, 95  
Andrews, Helen, 53-54, 80  
Anino, Bob, 69  
Atkinson, Richard, 43  
Auslander, Vivian, 361  
Avakian, "Sparky," 324-325, 379
- Baden-Powell, Lord Robert, 31  
Bainbridge, Ken, 178  
Bainer, Roy, 287-288  
Barber, "Buzz," 398  
Bartholomew, Mr., 77, 86  
Bechtel Corporation, 443-444  
Bechtel, Steve Sr., 444  
Berdahl, Robert, 466  
Benton, Andy, 87-88  
Berkeley, California, 380-381,  
395  
school board, 325-327, 378-380  
Berkeley Foundation, 439-440  
Birge, Raymond T., 265  
Blackwell, David, 398, 428  
Blaney, David, 155  
Blaney, Dwight, 154-155, 172-174  
Blaney, Elizabeth, 154-157, 170-  
172, 174  
Blaney, Sir Henry, 154
- Boelter, Lewellyn K., 121-123,  
312, 471  
Boston, Massachusetts, and  
environs, 150-157, 170-178  
Bottari, Vic, 326  
Bowker, Albert, 257, 281, 292,  
349, 370, 398-399, 401-404,  
406-407, 413, 419-421, 430,  
432, 439-446, 452-456, 459-466,  
472  
Bowker, Rosedith, 401-402, 453  
Boy Scouts of America, 30-31, 41-  
42, 48, 62-68, 75-76, 105, 324-  
325  
Bridges, Harry, 76  
Brockerschmidt, Henry "Hank," 124  
Brown, David, 272-274, 292, 410,  
416  
Brown, Edmund "Pat," 202  
Brown, Jerry, 438-439  
Bundy, McGeorge, 331, 334-335  
Bureau of Labor Statistics, United  
States, 281, 287  
Bush, Vannevar, 167-168  
Butler, Johnny, 124
- Caen, Herb, 401  
Cal Engineer, 318-320, 366  
California, state higher education  
system, 100-101, 285-287  
Calloway, Doris, 454  
Calvin, Mel, 396  
Carey, Ben, 205-206  
Castro, Fidel, 288  
Chamberlin, Owen, 424  
Chance, Britt, 145  
Chernin, Milton, 410, 445  
Chicago, Illinois, 4, 129-133  
Christensen, Mark, 411, 413, 431,  
451, 455-456, 464  
Christopherson, Al, 62-68  
Clifford, Clark, 387-388, 391  
Clubb, Louise, 448

Cohelan, Jeffrey, 324-325, 328, 393

College of Engineering, UC

- administrative staff, 271-273, 279
- budget, 277-280, 369-370
- Computer Science Division, 292-294, 370, 405
- curriculum, 294-295, 321-322, 364-365, 404
- Dean's Coordinating Council, 248-250, 260, 300
- Department of Civil Engineering, 294, 369
- Department of Electrical Engineering, 292-294, 365, 474-475
- Department of Industrial Engineering, 292, 295, 369
- Department of Materials and Mineral Engineering, 295
- Department of Mechanical Engineering, 42, 194, 244-245, 249, 294
- Department of Naval Architecture and Offshore Engineering, 244, 295, 475
- Department of Nuclear Engineering, 295
- development of graduate program, 195, 243-244, 249
- electronics research program, 215-217
- Engineering Alumni Society, 318-319, 321, 366-367
- Engineers Joint Council (EJC), 316-318, 320, 366
- faculty, 356-357, 369
- fund raising for, 321, 357, 441-442
- Institute of Engineering Research, 201, 203-204, 208-217, 244, 249
- minority students, 359-361, 435
- Office of Research Services. See Institute of Engineering Research

College of Engineering, UC (cont'd.)

- promotion and tenure, system of, 260-267, 315-316, 368
- ranking, 257, 313-314, 344-345
- reorganization of, 244-258, 264-269
- research, funding for, 215-217, 357
- service to industry, 201
- students and student groups, 316-318, 320-321, 367-368, 370
- students, recruitment of, 280-287, 289-292, 356-361, 370, 435
- teaching in, 195-200, 366
- undergraduate curriculum, 256-258
- women students, 361, 435
- World War II, and, 43

Constance, Lincoln, 315

Cousteau, Jacques, 372

Culiner, Helen, 180

Cuneo, Billie, 187

Curry, Ma and Pa, 72-73

Curtis, Ann, 26

David, Narsai, 456

Davidson, Lynn, 263, 417

Davis, Harmer, 244, 250, 254, 267, 274, 294

Debreu, Gerard, 377

Deckman, Jean, 86-87

DeGarmo, E. Paul, 113-114

Department of Commerce, United States, 296-298, 328-330, 363, 394

Department of Defense, United States, 382-388

Department of Interior, United States, 297, 336

Depression, the Great, 27-28, 30, 47-48, 76-79, 89-90, 96-97, 101, 120-121

Deukmejian, George, 439

Deutsch, Monroe, 265, 403

- Devienne, Marcel and Jaqueline, 239  
 Dewey, Thomas E., 186  
 Dibble, Frank, 186  
 Dorn, John, 244  
 Drake, Robert, 122, 358  
 Droz, Marcel, 180, 183  
 DuBridge, Lee, 164, 167, 178, 299, 336-337, 339, 459  
 Durkin, Ned, 470
- Eberhart, Frances (Woertendyke), 1, 42-44, 119, 209-210, 246, 248, 262-264, 271-273, 410  
 Eberhart, Howard, 44, 272, 334  
 Einstein, Hans Albert, 205-206, 451  
 Elberg, Sanford "Sandy," 209, 309, 341-345, 413, 416, 420-421, 452  
 Environmental Protection Agency, United States, 336, 339  
 Erickson, Dick, 439  
 Esherick, Joe, 467-468  
 Evans, Griffith C., 265
- Fahd, Crown Prince, 286  
 Farber, Leonard, 206-207  
 Federal Aviation Administration, 332  
 Flanagan, Tom, 447-448  
 Folsom, Richard, 42, 117, 189, 193, 231, 250, 327  
 Ford Foundation, 331, 333-335  
 Fretter, Bill, 293, 447  
 Freud, Anna, 372
- Galloway, Dennis, 359  
 Gardner, David, 453-454  
 Garland, Clyne, 194-195, 201  
 Garman, Ray, 156, 180, 183  
 General Precision Laboratories, 182-187  
 G.I. Bill, 432  
 Glaser, Don, 378  
 Goldberg, Arthur, 303
- Goldberg, Rube, 112  
 Goldman, Richard, 92  
 Goldsmith, Werner, 205-206, 427  
 Goodrich, George, 30  
 Gordon, Duane, 134  
 Goudsmit, Samuel A., 266  
 Grenzbach, Bob, 124, 145  
 Grether, Ewald, 315  
 Guillaume, Roland, 234  
 Guthrie, Dick, 53-54
- Hagerty, Fran, 157-158, 170  
 Hale, Al, 200  
 Hansen, Raymond, 62  
 Ham, Lee, 86-87  
 Haworth, Lee, 165-166, 181  
 Hayakawa, S.I., 331-332  
 Herrero, Bob, 113  
 Heyman, Michael, 371, 432, 452-454, 460-461, 465  
 Heyns, Mrs. Roger, 402  
 Heyns, Roger, 276, 300, 339, 349, 355, 396-399, 413, 429, 472  
 Hicklin, Shirley, 86  
 Higginbottom, Willie, 178  
 Hildebrand, Joel, 375  
 Hilgard, Eugene W., 414  
 Hinds, Norman, 376, 427  
 Hodgen, Joseph D., 208  
 Hoffman, Allen, 126, 129-132, 140-141, 143  
 Holloman, Herb, 296, 328-330, 335, 382-387  
 Horning, Don, 190  
 Hoover, Herbert, 24, 96, 325  
 Humphrey, Hubert, H., 336, 384-387, 391, 426  
 Hurlbut, Frank, 193, 250  
 Hughes, Art, 172  
 Hutson, Art, 276
- influenza, 1918-1919 epidemic, 15-16  
 Ironbound Island, Maine, 173-174
- Jackson, Henry "Scoop," 336

- Jacob, Professor, 101  
 Jewell, Bill, 274  
 Johnson, George, 30, 205  
 Johnson, Hiram, 24, 78  
 Johnson, Lyndon B., 336, 385, 387, 390, 394, 426  
 Johnson, Mrs. Lyndon, 335-336  
 Johnston, Harold, 337-338  
 Jolly, Bill, 428  
 Jordan, Denny, 260
- Kadish, Sanford "Sandy," 398-400  
 Kaiser, Henry, 50  
 Kaiser Medical Corporation, 470-471  
 Kane, Enos, 189-193  
 Karelitz, [George? Michael?], 186  
 Kelly, Elizabeth, 470  
 Kennedy, John F., 323, 353, 370, 386, 394, 458  
 Kennedy, Robert, 384, 392-393  
 Kennedy, Ted, 323, 384  
 Kerley, Bob, 452  
 Kerr, Clark, 202, 241, 245-246, 248, 251, 258-259, 275, 289, 306, 311-315, 321, 341-347, 355-356, 362-363, 369, 392, 417  
 Ketcham, Frank, 278, 280, 437-438  
 King, Starr, 328  
 Knowland, Senator William, 301-302  
 Knight, Walter, 365, 407  
 Knox, Bob, 272  
 Kragen, Adrian, 345  
 Kuh, Ernie, 292, 294, 314, 345, 397, 442
- Lafaurie, Michel, 28, 37, 58-60, 84, 86  
 Laitone, Ed, 358  
 Lane, Violetta, 42, 118-119, 283-284, 367  
 Lankhammer, Nancy, 433  
 Latimer, Wendell M., 376, 427  
 Lawson, James, 143-144  
 Leighton Industries, San Francisco, California, 12-13
- Levy, Hans, 208  
 Lewis, Gilbert N., 265  
 Lindsay, John, 372  
 Look, 354, 362-364  
 Loomis, Alfred, 167  
 Loomis, F. Wheeler, 164  
 Lowe, Harry, 70, 73-74  
 Lubermirski family, 108  
 Lurie, Henry, 366  
 Lynn, Stuart, 462-464, 472  
 Lyon, Miss, 78
- Mailliard, Bill, 24, 325, 333, 381  
 Maisel, Sherman, 379  
 Manville, Hiram, 183  
 Markowitz, Sam, 428  
 Marshall, Larry, 121-123, 475  
 Martinelli, Ernie, 124, 158, 179-180  
 Martinelli, Ray, 117, 122  
 Maslach, Anna (née Pszczolkowska, mother), 1, 4-6, 8-16, 20, 24, 26, 36-37, 44-45, 52-53, 63, 132, 325  
 Maslach, Michael J. (father), 1-16, 20-25, 31, 36-37, 63, 85, 95-96, 108-109, 325, 378  
 Maslach, Christina (daughter), 2, 24, 43, 85, 175, 181-182, 185, 223, 227, 229, 233, 237-241, 247, 259, 325, 353-354, 434-435, 467  
 Maslach, Dillon (grandson), 469  
 Maslach, Doris (née Cuneo, wife), 77, 86-91, 93, 95, 109-110, 123-124, 138, 147, 155, 169, 170-178, 180-182, 187, 237-241, 250, 259, 275, 300, 325-326, 328, 345-346, 378-380, 391, 426, 468  
 Maslach, Jamie (son), 129, 185, 233, 237-241, 247, 259, 354  
 Maslach, Michael (brother), 61-62, 107, 120  
 Maslach, Sophie (sister), 61-62, 120



- Maslach, Steve (son), 233, 237-241, 247, 259, 354, 469  
 Massachusetts Institute of Technology, 295-296, 386, 466.  
See also Radiation Laboratory, MIT
- Matt, Rudi, 238
- Mauchlan, Errol, 278, 292, 345-346, 348-349, 370, 452
- McKie, Roy and Tuddy, 175
- McLaughlin, Donald H., 292, 340-344, 350, 375, 475
- McMillan, Edwin Mattison, 165, 227, 300, 374
- Menuhin, Yehudi, 21, 25
- Merriam, Lathe, 199
- Metzger, Mrs., 78, 91
- Meyer, Ed and Marjorie, 156, 176
- Meyerson, Martin, 276, 300-301, 311, 341-349, 398-399
- Morrin, Earl, 117, 122
- Mosconos, Angelina, 88
- Mt. Hamilton Observatory, 219-223
- Nathan, Ed and Harriet, 92
- National Aeronautics and Space Administration (NASA), 190-191, 232, 240, 296, 362
- National Defense Research Council, 120, 167
- National Science Foundation, 299, 339, 359, 362
- Nauta, Mrs., 118
- Navy, United States, 204, 297, 327-330, 382, 393-394, 458-459
- Nehru, 370
- Newman, Frank, 310-311, 341-345
- Nichols, Roy, 379
- Nitze, Paul, 330, 394
- Nixon, Richard M., 339, 394, 458-459
- North Atlantic Treaty Organization (NATO), 233
- O'Brien, Morrough "Mike" P., 1, 42-43, 118, 189, 204, 209-211, 231, 243-248, 250, 257, 262, 265, 271, 315, 405, 409
- Office of Civil Rights, 430-434, 445
- Office of Naval Research, 191-193, 201, 232, 240, 430, 432, 467
- Oppenheimer, J. Robert, 376
- Owen, Akiko, 255
- Park, Nancy, 278
- Park, Roderic, 257, 289, 407-408, 411, 419, 434-435, 446-447, 452-453, 476
- Parker, Earl, 244, 250-251, 253-255, 267, 274, 328
- Paderewski, Ignatz, 24-25, 325
- Peat Marwick Company, 439-440
- Perelman, Isidor, 418
- Peterson, Don, 244, 250
- Peterson, Gene, 428
- photographic equipment, design of, 184-185
- Pimentel, George, 299, 362
- Pister, Karl, 369
- pitot tube, 190-191
- Platt, Tony, 421, 429-430
- Pomona Pump Company, 118
- Post, Alan, 437
- Powell, Mike, 67-68
- Powell, Richard, 471
- prohibition, 18, 84
- Purcell, Edward Mills, 165
- Rabi, Isidor Isaac, 165-167
- Radiation Laboratory, MIT  
 declassification of, 178-180  
 design of radar systems, 145, 148-150, 158-163  
 impact of, 128-129  
 intensive wartime curriculum, 146-147  
 Manhattan Project, and, 178  
 military specialists, 383, 388  
 naval design, 160-162

Radiation Laboratory, MIT  
     (cont'd.)  
     security, 126-127, 140-141  
     social networks, 158-170  
     work culture, 158-160, 164  
     work environment, 139-144  
 Raleigh, Jack, 411  
 Rand, Sally, 106  
 Ravizza, Doris, 86  
 Reagan, Ronald, 355  
 Reinhard, Bob, 113  
 Renoir, Alan, 226-227  
 Rivero, Horacio "Rivets," 329  
 Roberti, Senator David A., 437  
 Rockwell, Mr., 79  
 Roebling Company landing crafts,  
     117-118  
 Rolph, "Sunny Jim," 17  
 Rosenthal, Joe, 459  
 Roosevelt, Franklin Delano, 78,  
     96, 325  
 Rossi, (mayor of San Francisco),  
     22  
 Roy, April, 415, 439, 460  
 Rumford, Byron, 333, 381-382  
 Rusk, Dean, 389-390  
  
 Sachrison, Dave, 463  
 Saltonstall, Senator Leverett,  
     147  
 Sammett, Loy, 411  
 San Francisco, California  
     Barrett and Hilp construction  
         company, 133-137  
     Bayview/Hunter's Point, 60  
     Benedetti family, 17-20  
     boating and ships, 50-51, 56-  
         57, 60, 90, 133, 260, 407-  
         408, 468-469  
     Catholic churches, 26-27  
     earthquake, 4-5  
     ethnic groups and  
         neighborhoods, 7, 21, 22-  
         24, 28-29, 37-38, 60, 81-82,  
         86-87, 134, 381  
     gangs, 34-35  
     housing, pre-World War II, 8,  
         10, 39-41

San Francisco, California  
     (cont'd.)  
     labor unions and strikes, 76-  
         77, 134-135  
     libraries, 29-30, 38-39, 46,  
         107, 473  
     Lone Mountain District, 13-14,  
         20  
     McAllister Street, 17  
     Mission District, 10-12  
     nightlife, 1930s, 48-50, 53,  
         67-68, 81-82, 84, 87, 106,  
         137-138  
     outdoor recreation, 52-54, 58-  
         59, 105-106  
     Polish community, 3, 7, 20-21,  
         23-24  
     population, 7, 104  
     prostitution, 83  
     restaurants, 28-29, 37-38, 82,  
         88-89, 104  
     sand dunes, 13, 20, 45-46, 104  
     schools, 36, 38, 40-41, 44-45,  
         77-85, 90-94, 241  
     transportation, pre-World War  
         II, 18-20, 33, 40, 88, 99-  
         100, 105  
     wine making, 18-19  
     World's Fair of 1939, 79-80,  
         94-95, 106  
 San Francisco Junior College, 98-  
     99, 102  
 San Francisco State University,  
     331  
 Sanazaro, Paul, 325, 378  
 Sargent, John Singer, 154-155  
 Save San Francisco Bay  
     Association, 315  
 Savio, Mario, 303-305, 347, 352,  
     355, 363  
 Saxon, David, 453-454, 458-459  
 Schade, Henry H. "Packy," 203,  
     210, 244, 254, 295  
 Schaff, Sam, 193, 250-251, 379  
 Schlichting, Gunter[?], 234-235  
 Science, 382-383  
 Scovill, Edith, 431  
 Sea Scouts, 50-51, 107, 133

- Seaborg, Glenn, 227, 241, 251,  
315, 368, 373-375, 378, 424
- Searcy, Alan, 348
- Searle, John, 348
- Seed, Harry Bolton, 250, 253, 294
- Segrè, Emilio, 424-425
- Sharp, Vic, 42, 62-68
- Shen, J.T.[?], 377
- Sherman, Frederick, 193, 224, 358
- Sherriffs, Alex, 306, 311, 346
- Shreve, Crump, and Lowe,  
silversmiths, 169
- Shultz, George, 298
- Sibley, Bob, 380
- Sibley, Carol, 380
- Silver, Sam, 213, 216-217, 244,  
250-254, 368
- Smedberg, William R., 329
- Smith, Al, 24
- Smith, Hart, 87
- Smith, \_\_\_\_\_, 282
- Smith, Norvel, 453
- Spanish Civil War, 78, 95, 97,  
108
- Sproul, Robert Gordon, 98, 101,  
265, 369
- Sputnik, 224-225, 230-233, 240,  
243
- Stageberg, Rachael, 273-274, 279,  
410, 415-416, 431-432, 451,  
460-461
- Stanley, Wendell, 374
- Stevens, "Pop," 55, 90
- Stevenson, Adlai, 324, 389
- Strong, Ed, 241, 251, 253-254,  
269, 274-276, 278, 280, 292,  
301, 306, 340-348, 368, 404,  
413, 474
- Student Nonviolent Coordinating  
Committee (SNCC), 302-303, 307
- Students for a Democratic Society  
(SDS), 307
- Summerton, Bill, 359-360
- Supersonic Transport (SST), 299,  
337-339
- Talbot, Larry, 250
- Tamalpais, Mount, 33-34
- Teller, Edward, 376, 462
- Terman, Frederick E., 403
- Thant, U, 389
- Thomas, Norman, 186
- Tien, Chang-Lin, 122, 357-359,  
405, 450-451, 465, 477
- Tilton, Pete, 124
- Tobias, Charlie, 338, 427
- Towle, Katherine, 302-303
- Townes, Charlie, 128, 392, 426,  
458
- Townes, Frances, 426
- Tramontolo, Chauncey, 22, 24
- Trefethen, Gene, 440
- Tresidder, Donald B., 72
- Truman, Harry S, 186
- Turner, \_\_\_\_\_, 394
- Uhl, (mayor of San Francisco), 22
- Underhill, Robert, 371
- Universidad Catolica, Chile, 333
- University of Bandung, Indonesia,  
334
- University of California, Berkeley  
Academic Senate, 225-229, 257,  
275-276, 307-311, 321, 327,  
345, 364-365, 400, 404, 411,  
413, 418-422, 428-429, 445-  
448, 471
- accounting, 201-203
- administrators, appointment of,  
398-404
- affirmative action, 430-436,  
445, 454
- Associated Students of the  
University of California  
(ASUC), 320-321
- bureaucracy, 208-213, 228-229,  
247-248, 450-451
- Chancellor's Coordinating  
Advisory Council, 300-301,  
306
- College of Environmental  
Design, 407, 409
- College of Letters and Science,  
245, 292, 294, 327, 364-365,  
406-409, 417, 444-445

University of California, Berkeley  
(cont'd.)

College of Mining, 292, 416, 474  
College of Natural Resources, 409, 413-415, 476  
campuses, 242, 288-289, 312, 355  
combined degrees, 417-420  
community colleges, and, 98, 281-287, 289-291  
Computer Center, 459-460, 462-464  
curriculum, 248, 258, 281-283, 289-295, 322, 344, 357, 364-365, 408-409, 435-445, 465, 474-475  
departments of engineering.  
    See individual headings  
    under College of  
    Engineering, UC  
faculty, 203-205, 218-219, 227-228, 251-252, 259-267, 277-280, 315-316, 409, 429-430, 432-435, 446-450, 464  
faculty club, 276, 310, 319, 336-337, 350-351, 374-376, 378, 427-428  
fraternities and sororities, 304  
federal contracts, 192, 201-202, 334-335  
Filthy Speech Movement, 300, 311, 347  
Free Speech Movement, 258, 270-271, 279, 301-311, 319, 321, 339-349, 351, 355, 372, 384  
fund raising for, 439-445  
honorary degrees, 372-373  
Graduate Council, 413, 420, 422  
loyalty oath, 207-208  
patent policy, 371-372  
public art, 137  
radiation laboratory, 119  
Regents, 225, 309, 321, 340-345, 355, 372, 421, 429, 431, 453-454, 463

University of California, Berkeley  
(cont'd.)

research, funding for, 215-217, 226-227  
review of academic departments, 421-422  
salaries and benefits, 190  
School of Business  
    Administration, 409, 441  
School of Criminology, 420-422, 428-429  
School of Information Sciences, 442, 476  
School of Journalism, 442  
School of Law, 407, 409  
School of Social Welfare, 445-446  
security clearances, 425-426  
shadow cabinet, 340-349  
social life and customs, 110-112, 205-207, 427-428  
state funding for, 437-439, 444  
student protests, 455-457.  
    See also individual protest  
    movement names  
teaching, 195-200, 207  
Third World Liberation  
    Movement, 300, 310-311, 350-355, 397  
tuition, 202  
University of California, Davis, 287-289, 416-417  
University of California  
    Extension, 289  
University of California, Los Angeles, 334  
University of California, San Francisco, 334, 417  
University of Kentucky, 334  
  
Valley, George, 128  
Vietnam War, 323, 385-391, 326  
Vogt, Carl, 187, 189, 205-207, 218  
von Karman, Theodore, 233-234

- Wallace, Henry, 186  
 Warner, John, 297, 330, 394  
 Warren, Earl, 33, 373  
 Watt, Sir Watson, 163-164  
 Wellman, Harry, 341, 369  
 West, Charlie, 179  
 Westmoreland, William C., 385, 387  
 Weyhausen, John, 295, 321, 475  
 Whinnery, John, 43, 100, 213, 216-217, 244, 246-253, 260, 262, 266-268, 282, 294, 312, 405, 426, 458  
 Whitney, Stanley, 33  
 Wiegel, Bob, 338  
 Wiesner, Jerome, 162, 392, 396  
 Wilson, Charles, 216  
 Wilson, Garff, 372  
 Wilson, Lionel, 378  
 Woertendyke, Frances. See Eberhart, Frances  
 Wolfe, Dael, 382  
 World War I, 14-15, 21  
 World War II, 68, 97, 108-110, 120-123, 275  
     aftermath, 388, 432  
     civilian life, 142  
     end of, 166-167, 178-180, 182  
     Japanese American relocation, 122  
     radar research for. See Radiation Laboratory, MIT  
 Woo, Carol, 86  
 Wright, Anne, 278, 433
- Yeager, Chuck, 477-478  
 Yosemite National Park, 66-75, 329, 340  
 Yosemite Park Curry Company, 70-75, 95-96
- Zacharias, Jerrold, 143-144, 163, 387-388  
 Zadeh, Lotfi, 273, 293-294, 365, 392, 405  
 Zimbardo, Phil, 467



Eleanor Herz Swent

Born in Lead, South Dakota, where her father became chief metallurgist for the Homestake Mining Company. Her mother was a high school geology teacher before marriage.

Attended schools in Lead, South Dakota, Dana Hall School, and Wellesley College, Massachusetts. Phi Beta Kappa. M.A. in English, University of Denver. Assistant to the President, Elmira College, New York. Married to Langan Waterman Swent, mining engineer.

Since marriage has lived in Tayoltita, Durango, Mexico; Lead, South Dakota; Grants, New Mexico; Piedmont, California.

Teacher of English as a Second Language to adults in the Oakland, California public schools. Author of an independent oral history project, Newcomers to the East Bay, interviews with Asian refugees and immigrants. Oral historian for the Oakland Neighborhood History Project.

Interviewer, Regional Oral History Office since 1985, specializing in mining history. In 1998, awarded LL.D. by South Dakota School of Mines and Technology.













U. C. BERKELEY LIBRARIES



C068216558

